COMPUTER NETWORK AND DATA COMMUNICATION

1. Which of the following is called when collection of various computers seems a single coherent system to its client?
(a) Computer network
(b) Distributed system
(c) Both (a) and (b)
(d) None of the mentioned

2. In which type of following signal the bit rate always equals the baud rate?
(a) FSK (b) QAM
(c) 4-PSK (d) PSK

3. On the top of another network ______ is built?
(a) Prior network (b) chief network
(c) Prime network (d) overlay network

4. Nodes in a computer network are
(a) the computer that originates the data
(b) the computer that routes the data
(c) the computer that terminates the data
(d) all of the mentioned

5. Communication channel is shared by all the machines on the network in
(a) broadcast network
(b) unicast network
(c) multicast network
(d) none of the mentioned

6. Bluetooth is an example of
(a) personal area network
(b) local area network
(c) virtual private network
(d) none of the mentioned

7. A ______ is a device that forwards packets between networks by processing the routing information included in the packet.
(a) bridge (b) firewall
(c) router (d) all of the mentioned

8. A list of protocols used by a system, one protocol per layer, is called
(a) Protocol architecture
(b) Protocol stack
(c) Protocol suit
(d) None of the mentioned

9. Network congestion occurs
(a) in case of traffic overloading
(b) When a system terminates
(c) When connection between two nodes terminates
(d) None of the mentioned

10. Which one of the following extends a private network across public networks?
(a) Local area network
(b) Virtual private network
(c) Enterprise private network
(d) Storage area network

11. The IETF standards documents are called
(a) RFC (b) RCF
(c) ID (d) None of the mentioned

12. In the layer hierarchy as the data packet moves from the upper to the lower layers, headers are
(a) Added (b) Removed
(c) Rearranged (d) Modified

13. The structure or format of data is called
(a) Syntax
(b) Semantics
(c) Struct
(d) None of the mentioned

14. Communication between a computer and a keyboard involves ______ transmission
(a) Automatic (b) Half-duplex
(c) Full-duplex (d) Simplex

15. The first Network
(a) CNNET (b) NSFNET
(c) ASAPNET (d) ARPANET

16. Which of this is not a network edge device?
(a) PC (b) Smartphones
(c) Servers (d) Switch

17. A set of rules that governs data communication
(a) Protocols
(b) Standards
(c) RFCs
(d) None of the mentioned

18. Three or more devices share a link in connection
(a) Uni point
(b) Multipoint
(c) Point to point
(d) None of the mentioned

19. OSI stands for
(a) open system interconnection
(b) operating system interface
(c) optical service implementation
(d) none of the mentioned

20 The OSI model has _______ layers.
(a) 4 (b) 5
(c) 6 (d) 7

21 TCP/IP model does not have layer but OSI model have this layer.
(a) session layer
(b) presentation layer
(c) application layer
(d) both (a) and (b)

22. Which layer links the network support layers and user support layers?
(a) session layer (b) data link layer
(c) transport layer (d) network layer

23. TCP/IP model was developed _______ the OSI model.
(a) prior to
(b) after
(c) simultaneous to
(d) none of the mentioned

24. Which layer is responsible for process to process delivery?
(a) network layer (b) transport layer
(c) session layer (d) data link layer

25. Which address identifies a process on a host?
(a) physical address
(b) logical address
(c) port address
(d) specific address

26. Which layer provides the services to user?
(a) application layer
(b) session layer
(c) presentation layer
(d) none of the mentioned

27. Transmission data rate is decided by
(a) network layer (b) physical layer
(c) data link layer (d) transport layer

28. A piece of icon or image on a web page associated with another webpage is called
(a) URL
(b) hyperlink
(c) plugin
(d) none of the mentioned

29. Dynamic web page
(a) is same every time whenever it displays
(b) generates on demand by a program or a request from browser
(c) both (a) and (b)
(d) none of the mentioned

30. What is a web browser?
(a) a program that can display a web page
(b) a program used to view html documents
(c) it enables user to access the resources of internet
(d) All of the mentioned

31. Common gateway interface is used to
(a) generate executable files from web content by web server
(b) generate web pages
(c) stream videos
(d) none of the mentioned

32. URL stands for
(a) unique reference label
(b) uniform reference label
(c) uniform resource locator
(d) unique resource locator

33. A web cookie is a small piece of data
(a) sent from a website and stored in user's web browser while a user is browsing a website
(b) sent from user and stored in the server while a server is browsing a website
(c) sent from root server to all servers
(d) none of the mentioned

34. Which one of the following is not used to generate dynamic web pages?
(a) PHP
(b) ASP.NET
(c) JSP
(d) none of the mentioned

35. An alternative of JavaScript on windows platform is
(a) VB Script
(b) ASP.NET
(c) JSP
(d) none of the mentioned

36. What is document object model (DOM)?
(a) convention for representing and interacting with objects in html documents
(b) application programming interface
(c) hierarchy of objects in ASP.NET
(d) none of the mentioned

37. AJAX stands for
(a) asynchronous JavaScript and xml
(b) advanced JSP and xml
(c) asynchronous JSP and xml
(d) advanced JavaScript and xml

38. What is the access point (AP) in wireless LAN?
(a) device that allows wireless devices to connect to a wired network
(b) wireless devices itself
(c) both (a) and (b)
(d) none of the mentioned

39. In wireless ad-hoc network
(a) access point is not required
(b) access point is must
(c) nodes are not required
(d) none of the mentioned

40. Which multiple access technique is used by IEEE 802.11 standard for wireless LAN?
(a) CDMA (b) CSMA/CA
(c) ALOHA (d) none of the mentioned

41. In wireless distribution system
(a) multiple access point are inter-connected with each other
(b) there is no access point
(c) only one access point exists
(d) none of the mentioned

42. A wireless network interface controller can work in
(a) infrastructure mode
(b) ad-hoc mode
(c) both (a) and (b)
(d) none of the mentioned

43. In wireless network an extended service set is a set of
(a) connected basic service sets
(b) all stations
(c) all access points
(d) none of the mentioned

44. Mostly ______ is used in wireless LAN.
(a) time division multiplexing
(b) orthogonal frequency division multiplexing
(c) space division multiplexing
(d) none of the mentioned

45. Which one of the following event is not possible in wireless LAN?
(a) collision detection
(b) acknowledgement of data frames
(c) multi-mode data transmission
(d) none of the mentioned

46. What is Wired Equivalent Privacy (WEP)?
(a) security algorithm for Ethernet
(b) security algorithm for wireless networks
(c) security algorithm for USB communication
(d) none of the mentioned

47. What is WPA?
(a) Wi-Fi protected access
(b) wired protected access
(c) wired process access
(d) Wi-Fi process access

48. Which of this is not a guided media?
(a) Fiber optical cable
(b) Coaxial cable
(c) Wireless LAN
(d) Copper wire

49. UTP is commonly used in
(a) DSL
(b) FTTP
(c) HTTP
(d) None of the mentioned

50. Coaxial cable consists of ______ concentric copper conductors.
(a) 1 (b) 2
(c) 3 (d) 4

51. Fiber optics possess following properties
(a) Immune electromagnetic interference
(b) Very less signal attenuation
(c) Very hard to tap
(d) All of the mentioned

52 If an Optical Carrier is represented as OC-n, generally the link speed equals (in Mbps),
(a) n*39.8 (b) n*51.8
(c) 2n*51.8 (d) none of the mentioned

53. Terrestrial radio channels are broadly classified into ______ groups.
(a) 2 (b) 3
(c) 4 (d) 1

54. Radio channels are attractive medium because
(a) Can penetrate walls
(b) Connectivity can be given to mobile user
(c) Can carry signals for long distance
(d) All of the mentioned

55. Geostationary satellites
(a) Are placed at a fixed point above the earth
(b) Rotate the earth about a fixed axis
(c) Rotate the earth about a varying axis
(d) All of the mentioned

56. The sharing of a medium and its link by two or more devices is called ______
(a) Fully duplexing
(b) Multiplexing
(c) Both a and b
(d) None of the mentioned

57. Multiplexing is used in ______
(a) Packet switching
(b) Circuit switching
(c) Data switching
(d) None of the mentioned

58. Which multiplexing technique transmits digital signals?
(a) FDM
(b) TDM
(c) WDM
(d) None of the mentioned

59. If there are n signal sources of same data rate than TDM link has ______ slots
(a) n (b) n/2
(c) n*2 (d) 2^n

60 If link transmits 4000frames per second, and each slot has 8 bits, the transmission rate of circuit this TDM is
(a) 32kbps
(b) 500bps
(c) 500kbps
(d) None of the mentioned

61. The state when dedicated signals are idle are called
(a) Death period
(b) Poison period
(c) Silent period
(d) None of the mentioned

62. Multiplexing can provide
(a) Efficiency (b) Privacy
(c) Anti jamming (d) Both a and b

63. In TDM, the transmission rate of the Multiplexed path is usually ______ the sum of the transmission rates of the signal sources.
(a) Greater than
(b) Lesser than
(c) Equal to
(d) Equal to or greater than

64. In TDM, slots are further divided into
(a) Seconds
(b) Frames
(c) Packets
(d) None of the mentioned

65. Multiplexing technique that shifts each signal to a different carrier frequency
(a) FDM (b) TDM
(c) Either a or b (d) Both a and b

66. Physical or logical arrangement of network is
(a) Topology
(b) Routing
(c) Networking
(d) None of the mentioned

67 In this topology there is a central controller or hub
(a) Star (b) Mesh
(c) Ring (d) Bus

68 This topology requires multipoint connection
(a) Star (b) Mesh
(c) Ring (d) Bus

69. Data communication system spanning states, countries, or the whole world is
(a) LAN
(b) WAN
(c) MAN
(d) None of the mentioned

70. Data communication system within a building or campus is
(a) LAN
(b) WAN
(c) MAN
(d) None of the mentioned

71. Expand WAN
(a) World area network
(b) Wide area network
(c) Web area network
(d) None of the mentioned

72. A local telephone network is an example of a ______ network
(a) Packet switched
(b) Circuit switched
(c) Both of the mentioned
(d) None of the mentioned

73. Most packet switches use this principle
(a) Stop and wait
(b) Store and forward
(c) Both of the mentioned
(d) None of the mentioned

74. If there are N routers from source to destination, total end to end delay in sending packet P (L->number of bits in the packet R-> transmission rate)
(a) N (b) (N*L)/R
(c) (2N*L)/R (d) L/R

75. Method(s) to move data through a network of links and switches
(a) Packet switching
(b) Circuit switching
(c) Line switching
(d) Both a and b

76. The resources needed for communication between end systems are reserved for the duration of session between end systems in ______
(a) Packet switching
(b) Circuit switching
(c) Line switching
(d) Frequency switching

77. As the resources are reserved between two communicating end systems in circuit switching, this is achieved
(a) authentication
(b) guaranteed constant rate
(c) reliability
(d) store and forward

78. In ______ resources are allocated on demand.
(a) packet switching
(b) circuit switching
(c) line switching
(d) frequency switching

79. What is internet?
(a) a single network
(b) a vast collection of different networks
(c) interconnection of local area networks
(d) none of the mentioned

80. To join the internet, the computer has to be connected to a
(a) internet architecture board
(b) internet society
(c) internet service provider
(d) none of the mentioned

81. Internet access by transmitting digital data over the wires of a local telephone network is provided by
(a) leased line
(b) digital subscriber line
(c) digital signal line
(d) none of the mentioned

82. ISP exchanges internet traffic between their networks by
(a) internet exchange point
(b) subscriber end point
(c) ISP end point
(d) none of the mentioned

83. Which one of the following protocol is not used in internet?
(a) HTTP
(b) DHCP
(c) DNS
(d) none of the mentioned

84. IPv6 addressed have a size of
(a) 32 bits (b) 64 bits
(c) 128 bits (d) 265 bits

85. Internet works on
(a) packet switching
(b) circuit switching
(c) both (a) and (b)
(d) none of the mentioned

86. Which one of the following is not an application layer protocol used in internet?
(a) remote procedure call
(b) internet relay chat
(c) resource reservation protocol
(d) none of the mentioned

87. Which protocol assigns IP address to the client connected in the internet?
(a) DHCP
(b) IP
(c) RPC
(d) none of the mentioned

88. Which one of the following is not used in media access control?
(a) Ethernet
(b) digital subscriber line
(c) fiber distributed data interface
(d) none of the mentioned

89. IPsec is designed to provide the security at the
(a) transport layer
(b) network layer
(c) application layer
(d) session layer

90. In tunnel mode IPsec protects the
(a) entire IP packet
(b) IP header
(c) IP payload
(d) none of the mentioned

91. Network layer firewall works as a
(a) frame filter
(b) packet filter
(c) both (a) and (b)
(d) none of the mentioned

92. Network layer firewall has two sub-categories as
(a) stateful firewall and stateless firewall
(b) bit oriented firewall and byte oriented firewall
(c) frame firewall and packet firewall
(d) none of the mentioned

93. WPA2 is used for security in
(a) Ethernet
(b) Bluetooth
(c) Wi-Fi
(d) none of the mentioned

94. An attempt to make a computer resource unavailable to its intended users is called
(a) denial-of-service attack
(b) virus attack
(c) worms attack
(d) botnet process

95. Extensible authentication protocol is authentication framework frequently used in
(a) wired personal area network
(b) wireless networks
(c) wired local area network
(d) none of the mentioned

96. Pretty good privacy (PGP) is used in
(a) browser security
(b) email security
(c) FTP security
(d) none of the mentioned

97. PGP encrypts data by using a block cipher called
(a) international data encryption algorithm
(b) private data encryption algorithm
(c) internet data encryption algorithm
(d) none of the mentioned

98. When a DNS server accepts and uses incorrect information from a host that has no authority giving that information, then it is called
(a) DNS lookup
(b) DNS hijacking
(c) DNS spoofing
(d) none of the mentioned

99. Which of the following delay is faced by the packet in travelling from one end system to another?
(a) Propagation delay
(b) Queuing delay
(c) Transmission delay
(d) All of the mentioned

100. For a 10Mbps Ethernet link, if the length of the packet is 32bits, the transmission delay is (in milliseconds)
(a) 3.2
(b) 32
(c) 0.32
(d) None of the mentioned

101. The time required to examine the packet's header and determine where to direct the packet is part of
(a) Processing delay
(b) Queuing delay
(c) Transmission delay
(d) All of the mentioned

102. Traffic intensity is given by, where L = number of bits in the packet a = average rate R = transmission rate
(a) La/R
(b) LR/a
(c) R/La
(d) None of the mentioned

103. In the transfer of file between server and client, if the transmission rates along the path is 10Mbps, 20Mbps, 30Mbps, 40Mbps. The throughput is usually
(a) 20Mbps (b) 10Mbps
(c) 40Mbps (d) 50Mbps

104. If end to end delay is given by dend-end = N(dproc + dtrans + dprop) is a non congested network. The number of routers between source and destination is
(a) N/2 (b) N
(c) N-1 (d) 2N

105. In a network, If P is the only packet being transmitted and there was no earlier transmission, which of the following delays could be zero
(a) Propagation delay
(b) Queuing delay
(c) Transmission delay
(d) Processing delay

106. Transmission delay does not depend on
(a) Packet length
(b) Distance between the routers
(c) Transmission rate
(d) None of the mentioned

107. Propagation delay depends on
(a) Packet length
(b) Transmission rate
(c) Distance between the routers
(d) None of the mentioned

108. The number of layers in Internet protocol stack
(a) 5
(b) 7
(c) 6
(d) None of the mentioned

109. The number of layers in ISO OSI reference model
(a) 5
(b) 7
(c) 6
(d) None of the mentioned

110. This layer in an addition to OSI model
(a) Application layer
(b) Presentation layer
(c) Session layer
(d) Both b and c

111. Application layer is implemented in
(a) End system
(b) NIC
(c) Ethernet
(d) None of the mentioned

112. Transport layer is implemented in
(a) End system
(b) NIC
(c) Ethernet
(d) None of the mentioned

113. The functionalities of presentation layer includes
(a) Data compression
(b) Data encryption
(c) Data description
(d) All of the mentioned

114. Delimiting and synchronization of data exchange is provided by
(a) Application layer
(b) Session layer
(c) Transport layer
(d) Link layer

115. In OSI model, when data is sent from device A to device B, the 5th layer to receive data at B is
(a) Application layer
(b) Transport layer
(c) Link layer
(d) Session layer

116. In Internet protocol stack, when data is sent from device A to device B, the 5th layer to receive data at B is
(a) Application layer
(b) Transport layer
(c) Link layer
(d) Session layer

117. In the OSI model, as a data packet moves from the lower to the upper layers, headers are ______.
(a) Added
(b) Removed
(c) Rearranged
(d) None of the mentioned

118. Identify the statement which cannot be associated with OSI model
(a) A structured way to discuss and easier update Yatem components
(b) One layer may duplicate lower layer functionality
(c) Functionality at one layer no way requires information from another layer
(d) None of the mentioned

119. The number of objects in a Web page which consists of 4 jpeg images and HTML text is ______.
(a) 4
(b) 1
(c) 5
(d) None of the mentioned

120. The default connection type used by HTTP is ______.
(a) Persistent
(b) Non-persistent
(c) Either of the mentioned
(d) None of the mentioned

121. The time taken by a packet to travel from client to server and then back to the client is called ______
(a) STT
(b) RTT
(c) PTT
(d) None of the mentioned

122. The HTTP request message is sent in ______ part of three-way handshake.
(a) First
(b) Second
(c) Third
(d) None of the mentioned

123. In the process of fetching a web page from a server the HTTP request/response takes ______ RTTs.
(a) 2 (b) 1
(c) 4 (d) 3

124. The first line of HTTP request message is called ______.
(a) Request line
(b) Header line
(c) Status line
(d) Entity line

125. The values GET, POST, HEAD etc. are specified in ______ of HTTP message
(a) Request line
(b) Header line
(c) Status line
(d) Entity body

126. The ______ method when used in the method field, leaves entity body empty.
(a) POST
(b) GET
(c) Both of the mentioned
(d) None of the mentioned

127. The HTTP response message leaves out the requested object when ______ method is used
(a) GET (b) POST
(c) HEAD (d) PUT

128. Find the oddly matched HTTP status codes
(a) 200 OK
(b) 400 Bad Request
(c) 301 Moved permanently
(d) 304 Not Found

129. Which of the following is not correct?
(a) Web cache doesn't has its own disk space
(b) Web cache can act both like server and client
(c) Web cache might reduce the response time
(d) Web cache contains copies of recently. Requested objects

130 The conditional GET mechanism
(a) Imposes conditions on the objects to be requested
(b) Limits the number of response from a server
(c) Helps to keep a cache up to date
(d) None of the mentioned

131 Which of the following is present in both an HTTP request line and a status line?
(a) HTTP version number
(b) URL
(c) Method
(d) None of the mentioned

132. The physical layer concerns with
(a) bit-by-bit delivery
(b) process to process delivery
(c) application to application delivery
(d) none of the mentioned

133. Which transmission media has the highest transmission speed in a network?
(a) coaxial cable (b) twisted pair cable
(c) optical fiber (d) electrical cable

134. Bits can be send over guided and unguided media as analog signal by
(a) digital modulation
(b) amplitude modulation
(c) frequency modulation
(d) phase modulation

135. Which address is used in an internet employing the TCP/IP protocols?
(a) physical address and logical address
(b) port address
(c) specific address
(d) all of the mentioned

136. The portion of physical layer that interfaces with the media access control sub layer is called
(a) Physical signaling sub layer
(b) Physical data sub layer
(c) Physical address sub layer
(d) None of the mentioned

137. Physical layer provides
(a) mechanical specifications of electrical connectors and cables
(b) electrical specification of transmission line signal level
(c) specification for IR over optical fiber
(d) all of the mentioned

138. In asynchronous serial communication the physical layer provides
(a) start and stop signaling
(b) flow control
(c) both (a) and (b)
(d) none of the mentioned

139. The physical layer is responsible for
(a) line coding
(b) channel coding
(c) modulation
(d) all of the mentioned

140. The physical layer translates logical communication requests from the ______ into hardware specific operations.
(a) data link layer (b) network layer
(c) transport layer (d) application layer

141. A single channel is shared by multiple signals by
(a) Analog modulation
(b) Digital modulation
(c) Multiplexing
(d) None of the mentioned

142. Wireless transmission can be done via
(a) radio waves (b) microwaves
(c) infrared (d) all of the mentioned

143. UDP needs the ______ address to deliver the user datagram to the correct application process
(a) port (b) application
(c) internet (d) intranet

144. The ______ was originally developed as a mechanism to enable disk-less hosts to be remotely booted over a network as workstations, routers, terminal concentrators and so on.
(a) ICMP (b) BOOTP
(c) UDP (d) ARP

145. Which of the following does UDP guarantee?
(a) Flow control
(b) Connection-oriented delivery
(c) Data control
(d) None of the above

146. ______ provides a framework for passing configuration information to hosts on a TCP/IP network.
(a) Dynamic Host Configuration Protocol (DHCP)
(b) Address Resolution Protocol (ARP)
(c) Internet Protocol (IP)
(d) Internet Control Message Protocol (ICMP)

147. The source port address on the UDP user datagram header defines
(a) the sending computer
(b) the receiving computer
(c) the process running on the sending computer
(d) the process running on the receiving computer

148. The mechanisms supported by DHCP for IP address allocation on a TCP/IP network is/are ...
(a) Automatic allocation
(b) Dynamic allocation
(c) Manual allocation
(d) All of the above

149. UDP is called a ______ transport protocol.
(a) connection-oriented, unreliable
(b) connectionless, reliable
(c) connectionless, unreliable
(d) connection, reliable

150. DHCP in TCP/IP network assigns an IP address for a limited period of time. Such a network address is called a......
(a) lease
(b) limited network
(c) timed network
(d) assigned network

151. UDP does not add anything to the services of IP except for providing ______ communication.
(a) node to node
(b) process to process
(c) host to host
(d) interface to interface

152. The use of ______ allows centralized configuration of multiple clients.
(a) ICMP (b) BOOTP
(c) UDP (d) ARP

153. UDP is an acronym for ______
(a) User Delivery Protocol
(b) User Datagram Procedure
(c) User Datagram Protocol
(d) User Delivery Procedure

154. ______ is where users typically interact with the TCP/IP network.
(a) Link layer
(b) Network layer
(c) Transport layer
(d) Application layer

155. The local host and the remote host are defined using IP addresses. To define the processes, we need second identifiers called ______
(a) UDP addresses
(b) transport addresses
(c) port addresses
(d) TCP addresses

156. The______ is responsible for communicating with the actual network hardware.
(a) Link layer (b) Network layer
(c) Transport layer (d) Application layer

157. UDP packets are encapsulated in ______.
(a) an Ethernet frame
(b) an TCP segment
(c) an IP datagram
(d) an Ethernet packets

158. ______ is the protocol suite for the current Internet.
(a) TCP/IP (b) NCP
(c) UDP (d) ACM

159. UDP uses ______ to handle outgoing user datagrams from multiple processes on one host.
(a) flow control (b) multiplexing
(c) demultiplexing (d) data control

160. ______ provides full transport layer services to applications.
(a) TCP (b) UDP
(c) IP (d) ARP

161. UDP uses ______ to handle incoming user datagrams that go to different processes on the same host.
(a) flow control (b) multiplexing
(c) demultiplexing (d) data control

162. In the sending computer, UDP receives a data unit from the ______ layer.
(a) application (b) transport
(c) IP (d) interface

163. The principle of ______states that the routing table is stored from the longest mask to the shortest mask.
(a) first mask matching
(b) shortest mask matching
(c) longest mask matching
(d) very shortest mask matching

164. ______ are two popular examples of distance vector routing protocols.
(a) OSPF and RIP
(b) RIP and BGP
(c) BGP and OSPF
(d) BGP and SPF

165. ______ deals with the issues of creating and maintaining routing tables.
(a) Forwarding (b) Routing
(c) Directing (d) None directing

166. During an adverse condition, the length of time for every device in the network to produce an accurate routing table is called the ______
(a) accurate time
(b) integrated time
(c) convergence time
(d) average time

167. A ______ routing table contains information entered manually.
(a) static
(b) dynamic
(c) hierarchical
(d) non static

168. Which of the following is/are the uses of static routing methods.
(a) To manually define a default route.
(b) To provide more secure network environment.
(c) To provide more efficient resource utilization.
(d) All of the above

169. A ______ routing table is updated periodically using one of the dynamic routing protocols.
(a) static (b) dynamic
(c) hierarchical (d) non static

170. Which of the following is not the category of dynamic routing algorithm.
(a) Distance vector protocols
(b) Link state protocols
(c) Hybrid protocols
(d) Automatic state protocols

171. In ______ forwarding, the full IP address of a destination is given in the routing table.
(a) next-hop (b) network-specific
(c) host-specific (d) default

172. To build the routing table, ______ algorithms allow routers to automatically discover and maintain awareness or the paths through the network.
(a) Static routing
(b) Dynamic routing
(c) Hybrid routing
(d) Automatic routing

173. In ______ forwarding, the mask and destination addresses are both 0.0.0.0 in the routing table.
(a) next-hop (b) network-specific
(c) host-specific (d) default

174. To build the routing table, ______ method use preprogrammed definitions representing paths through the network.
(a) Static routing
(b) Dynamic routing
(c) Hybrid routing
(d) Automatic routing

175. In ______ forwarding, the destination addresses is a network address in the routing table.
(a) next-hop (b) network-specific
(c) host-specific (d) default

176. ______ allow routers to exchange information within an AS.
(a) Interior Gateway Protocol (IGP)
(b) Exterior Gateway Protocol (EGP)
(c) Border Gateway Protocol (BGP)
(d) Static Gateway Protocol (SGP)

177. In ______ forwarding, the routing table holds the address of just the next hop instead of complete route information.
(a) next-hop (b) network-specific
(c) host-specific (d) default

178. Which of the following is an example of Exterior Gateway Protocol.
(a) Open Short Path First (OSPF)
(b) Border Gateway Protocol (BGP)
(c) Routing Information Protocol (RIP)
(d) All of the above

179. A one-to-all communication between one source and all hosts on a network is classified as a ______.
(a) unicast (b) multicast
(c) broadcast (d) point to point

180. ______ allow the exchange of summary information between autonomous systems.
(a) Interior Gateway Protocol (IGP)
(b) Exterior Gateway Protocol (EGP)
(c) Border Gateway Protocol (BGP)
(d) Dynamic Gateway Protocol (DGP)

181. A robust routing protocol provides the ability to ______ build and manage the information in the IP routing table.
(a) dynamically (b) statically
(c) hierarchically (d) All of the above

182. State True of False for definition of an autonomous system (AS).
i) An AS is defined as a physical portion of a larger IP network.
ii) An AS is normally comprised of an internetwork within an organization.
(a) i-True, ii-True
(b) i-True, ii-False
(c) i-False, ii-True
(d) i-False, ii-False

183. Alternate and adaptive routing algorithm belongs to ______.
(a) static routing
(b) permanent routing
(c) standard routing
(d) dynamic routing

184. ______ protocol is a popular example of a link state routing protocol.
(a) SPF (b) BGP
(c) RIP (d) OSPF

185. An example of routing algorithm is...
(a) TELNET (b) TNET
(c) ARPANET (d) ARNET

186. The Enhanced Interior Gateway Routing Protocol (EIGRP) is categorized as a ______.
(a) Distance vector routing protocols
(b) Link state routing protocols
(c) Hybrid routing protocols
(d) Automatic state routing protocols

187. In ______ routing, the routing table hold the address of just the next hop instead of complete route information.
(a) next-hop (b) host-specific
(c) network-specific (d) default

188. ______ was originally developed to provide a loop-free method of exchanging routing information between autonomous systems.
(a) OSPF (b) EIGRP
(c) BGP (d) RIP

189. In ______ routing, the destination address is a network address in the routing tables.
(a) next-hop (b) host-specific
(c) network-specific (d) default

190. Logical partitioning of the network, authentication and faster convergence rate are the advantages of....
(a) OSPF (b) EIGRP
(c) BGP (d) RIP

191. The ______ flag indicates the availability of a router.
(a) up
(b) host specific
(c) gateway
(d) added by redirection

192. The types of autonomous system defined by BGP is/are.
(a) Stub (b) Multi-homed
(c) Transit (d) All of the above

193. For a direct deliver, the______flag is on.
(a) up (b) host specific
(c) gateway (d) added by redirection

194. A ______ AS has connections to two or more autonomous systems and carries both local and transit traffic.
(a) Stub (b) Multi-homed
(c) Transit (d) All of the above

195. In unicast routing, each router in the domain has a table that defines a ______ path tree to possible destinations.
(a) average (b) longest
(c) shortest (d) very longest

196. ______ supports the simultaneous use of multiple unequal cost paths to a destination.
(a) OSPF (b) EIGRP
(c) BG (d) RIP

197. In multicast routing, each involved router needs to construct a ______ path tree for each group.
(a) average (b) longest
(c) shortest (d) very longest

198. Which of the following is/are the benefits provided by EIGRP?
i) Faster convergence
ii) partial routing updates
iii) High bandwidth utilization
iv) Route summarization
(a) i, iii and iv only
(b) i, ii and iii only
(c) ii, iii and iv only
(d) i, ii and iv only

199. In OSPF, a ______ link is a network is connected to only one router.
(a) point-to-point (b) transient
(c) stub (d) multipoint

200. ______ is the process of consolidating multiple contiguous routing entries into a single advertisement.
(a) Faster convergence
(b) Partial routing updates
(c) Route summarization
(d) Multiple protocols

201. In OSPF, when the link between two routers is broken, the administration may create a ______ link between them using a longer path that probably goes through several routers.
(a) point-to-point (b) transient
(c) stub (d) multipoint

202. ______ is the process of introducing external routers into an OSPF network.
(a) Route redistribution
(b) Route summarization
(c) Route reintroducing
(d) Route recreation

203. The primary goal of the ______ protocol is to provide a private channel between communicating application, which ensures privacy of data authentication of the partners, and integrity.
(a) SSL (b) ESP
(c) TSL (d) PSL

204. The ______ is used to provide integrity check, authentication and encryption to IP datagram.
(a) SSL (b) ESP
(c) TSL (d) PSL

205. In ______ mode, a common technique in packet-switched networks consists of wrapping a packet in a new one.
(a) Tunneling (b) Encapsulation
(c) Both A and B (d) None of the above

206. The ______ Is a collection of protocols designed by Internet Engineering Task Force(IETF) to provide security for a packet at the Network level.
(a) IPsec (b) Netsec
(c) Packetsec (d) Protocolsec

207. At the lower layer of SSL, a protocol for transferring data using a variety of predefined cipher and authentication combinations called the ______.
(a) SSL handshake protocol
(b) SSL authentication protocol
(c) SSL record protocol
(d) SSL cipher protocol

208. While initiating SSL session, the client code recognizes the SSL request and establishes a connection through TCP Part ______ to the SSL code on the server.
(a) 420 (b) 1032
(c) 443 (d) 322

209. On the upper layer of SSL, a protocol for initial authentication and transfer of encryption keys, called the ______.
(a) SSL handshake protocol
(b) SSL authentication protocol
(c) SSL record protocol
(d) SSL cipher protocol

210. State whether the following statement are true.
i) An application-level gateway is often referred to as a proxy.
ii) In proxy, a direct connection is established between the client and destination server.
(a) True, False (b) False, True
(c) True, True (d) False, False

211. In packet-filtering router, the following information can be external from the packet header.
i) Source IP address
ii) Destination IP address
iii) TCP/UDP source port
iv) ICMP message type
v) TCP/UDP destination port
(a) i, ii, iii and iv only
(b) i, iii, iv and v only
(c) ii, iii, iv and v only
(d) All i, ii, iii, iv and v

212. ______ mode is used whenever either end of a security association is gateway.
(a) Tunnel (b) Encapsulating
(c) Transport (d) Gateway

213. The examples of Interior Gateway Protocols (IGP) are.
i) Open Short Path First (OSPF)
ii) Routing Information Protocol (RIP)
iii) Border Gateway Protocol (BGP)
(a) i only (b) i, and ii only
(c) i and iii only (d) All i, ii and iii

214. FTP server listens to connections on port ______.
(a) 19 and 20 (b) 20 and 21
(c) 21 and 22 (d) 20 and 22

215. Which of the following operations can be performed by using FTP.
i) Connect to a remote host
ii) Select directory
iii) Define the transfer mode
iv) List file available
(a) i, and ii only
(b) i, ii and iii only
(c) ii, iii and iv only
(d) All i. ii, iii and iv

216. A ______ is a set of information that is exchanged between a client and web browser and a web server during an HTTP transaction.
(a) info set (b) client info
(c) cookie (d) transkie

217. Match the following HTTP status code to their respective definitions.

i) 400	a) OK
ii) 500	b) Not found
iii) 200	c) Continue
iv) 100	d) Internal server error

(a) i-b, ii-d, iii-a, iv-c
(b) i-a, ii-b, iii-c, iv-d
(c) i-b, ii-c, iii-a, iv-d
(d) i-b, ii-a, iii-c, iv-d

218. The bit rate always equals the baud rate in which type of signal?
(a) FSK (b) QAM
(c) 4-PSK (d) PSK

219. Asynchronous transmission is
(a) Slow (b) costly
(c) non-effective (d) fast

220. A simple cabling method, known as the ______ topology allows about 30 computers on a maximum cable length of about 600 feet.
(a) Ring (b) Bus
(c) Star (d) Mesh

221. The ______ layer is responsible fo resolving access to the shared media o resources.
(a) Physical (b) Mac sub layer
(c) Network (d) Transport

222. A WAN typically spans a set of countries that have data rates less than ______ Mbps.
(a) 2 (b) 1
(c) 4 (d) 100

223. ______ is a high performance fiber optic token ring LAN running at 100 Mbps over distances up to 1000 stations connected.
(a) FDDI (b) FDDT
(c) FDDR (d) FOTR

224. Which of the following are Gigabit Ethernets?
(a) 1000 BASE-SX
(b) 1000 BASE-LX
(c) 1000 BASE-CX
(d) All of above

225. ______ is a collective term for a number of Ethernet Standards that carry traffic at the nominal rate of 1000 Mbit/s against the original Ethernet speed of 10 Mbit/s.
(a) Ethernet
b) Fast Ethernet
(c) Gigabit Ethernet
(d) All of the above

226. ______ is another kind of fiber optic network with an active star for switching.
(a) S/NET (b) SW/NET
(c) NET/SW (d) FS/NET

227. The combination of ______ and ______ is often termed the local address of the local portion of the IP address.
(a) Network number and host number
(b) Network number and subnet number
(c) Subnet number and host number
(d) All of the above

228. ______ implies that all subnets obtained from the same subnet mask.
(a) Static sub netting
(b) Dynamic sub netting
(c) Variable length sub netting
(d) Both B and C

229. State whether true or false.
i) A connection oriented protocol can only use unicast addresses.
ii) The anycast service is included in IPV6.
(a) True, True (b) True, False
(c) False, True (d) False, False

230. The most important and common protocols associated TCP/IP internetwork layer are.
i) Internet protocol (IP)
ii) Internet control Message Protocol (ICMP)
iii) Bootstrap Protocol (Boot P)
iv) Dynamic Host Configuration Protocol (DHCP)
v) Address Resolution Protocol (ARP)
(a) i, ii, iii and iv only
(b) i, iii, iv and v only
(c) ii, iii, iv and v only
(d) All i, ii, iii, iv and v

231. ______ is responsible for converting the higher level protocol addresses (IP addresses) to physical network addresses.
(a) Address Resolution Protocol (ARP)
(b) Reverse Address Resolution Protocol (RARP)
(c) Bootstrap Protocol (BOOTP).
(d) Internet Control Message Protocol (ICMP)

232. Which of the following is not a mechanism that DHCP supports for IP address allocation?
(a) Automatic allocation
(b) Static allocation
(c) Dynamic allocation
(d) Manual allocation

233. Which of the following is not the layer of TCP/IP protocol?
(a) Application Layer
(b) Session Layer
(c) Transport Layer
(d) Internetwork layer

234. ______ address use 7 bits for the <network> and 24 bits for the <host> portion of the IP address.
(a) Class A (b) Class B
(c) Class C (d) Class D

235. ______ addresses are reserved for multicasting.
(a) Class B (b) Class C
(c) Class D (d) Class E

236. State the following statement is true or false.
i) In class B addresses a total of more than 1 billion addresses can be formed.
ii) Class E addresses are reserved for future or experimental use.
(a) True, False (b) True, True
(c) False, True (d) False, False

237. Which of the following statement is true?
i) An address with all bits 1 is interpreted as all networks or all hosts.
ii) The class A network 128.0.0.0 is defined as the loopback network.
(a) i only (b) ii only
(c) Both A and B (d) None of the above

238 Which is not the Regional Internet Registers (RIR) of the following?
(a) American Registry for Internet Numbers (ARIN)
(b) Europeans Registry for Internet Numbers (ERIN)
(c) Reseaux IP Europeans (RIPE)
(d) Asia Pacific Network Information Centre (APNI(c)

239. Match the following IEEE No to their corresponding Name for IEEE 802 standards for LANs.

i) 802.3	a) Wi-Fi
ii) 802.11	b) WiMa
iii) 802.15.1	c) Ethernet
iv) 802.16	d) Bluetooth

(a) i-b, ii-c, iii-d, iv-a
(b) i-c, ii-d, iii-a, iv-b
(c) i-c, ii-a, iii-d, iv-b
(d) i-b, ii-d, iii-c, iv-a

240. ______ was the first step in the evolution of Ethernet from a coaxial cable bus to hub managed, twisted pair network.
(a) Star LAN (b) Ring LAN
(c) Mesh LAN (d) All of the above

241. ______ is the predominant form of Fast Ethernet, and runs over two pairs of category 5 or above cable.
(a) 100 BASE-T (b) 100 BASE-TX
(c) 100 BASE-T4 (d) 100 BASE-T2

242. IEEE 802.3ab defines Gigabit Ethernet transmission over unshielded twisted pair (UTP) category 5, 5e or 6 cabling known as ______.
(a) 1000 BASE-T
(b) 1000 BASE-SX
(c) 1000 BASE-LX
(d) 1000 BASE-CX

243. In mesh topology, relationship between one device and another is ______.
(a) Primary to peer
(b) Peer to primary
(c) Primary to secondary
(d) Peer to Peer

244. The performance of data communications network depends on ______.
(a) Number of users
(b) The hardware and software
(c) The transmission
(d) All of the above

245. Find out the OSI layer, which performs token management.
(a) Network Layer
(b) Transport Layer
(c) Session Layer
(d) Presentation Layer

246. The name of the protocol which provides virtual terminal in TCP/IP model is.
(a) Telnet (b) SMTP
(c) HTTP (d) none of the above

247. The layer one of the OSI model is
(a) Physical layer
(b) Link layer
(c) Router layer
(d) Broadcast layer

248. What is the name of the network topology in which there are bi-directional links between each possible node?
(a) Ring (b) Star
(c) Tree (d) Mesh

249. What is the commonly used unit for measuring the speed of data transmission?
(a) Bytes per second
(b) Baud
(c) Bits per second
(d) Both B and C

250. Which of the communication modes support two way traffic but in only once direction of a time?
(a) Simplex
(b) Half-duplex
(c) Three quarter's duplex
(d) Full duplex

251. The loss in signal power as light travels down the fiber is called ______.
(a) Attenuation (b) Propagation
(c) Scattering (d) Interruption

252. Which of the following TCP/IP protocols is used for transferring files form one machine to another.
(a) FTP (b) SNMP
(c) SMTP (d) RPC

253. A network that needs human beings to manually route signals is called....
(a) Fiber Optic Network
(b) Bus Network
(c) T-switched network
(d) Ring network

254. TCP/IP ______ layer corresponds to the.SI models to three layers.
(a) Application (b) Presentation
(c) Session (d) Transport

255. Which of the transport layer protocols is connectionless?
(a) UDP (b) TCP
(c) FTP (d) Nvt

256. Which of the following applications allows a user to access and change remote files without actual transfer?
(a) DNS (b) FTP
(c) NFS (d) Telnet

257. The data unit in the TCP/IP layer called a ______.
(a) Message (b) Segment
(c) Datagram (d) Frame

258. DNS can obtain the ______ of host if its domain name is known and vice versa.
(a) Station address
(b) IP address
(c) Port address
(d) Checksum

259. Which of the following OSI layers correspond to TCP/IP's application layer?
(a) Application (b) Presentation
(c) Session (d) All of the above

260. Devices on one network can communicate with devices on another network via a
(a) File Server (b) Utility Server
(c) Printer Server (d) Gateway

261. A communication device that combines transmissions from several I/O devices into one line is a ______.
(a) Concentrator (b) Modifier
(c) Multiplexer (d) Full duplex file

262. Which layers of the OSI determines the interface often system with the user?
(a) Network (b) Application
(c) Data link (d) Session

263. Which of the following of the TCP/IP protocols is the used for transferring files from one machine to another?
(a) FTP (b) SNMP
(c) SMTP (d) Rpe

264. In which OSI layers does the FDDI protocol operate?
(a) Physical (b) Data link
(c) Network (d) A and B

265. In FDDI, data normally travel on ______.
(a) The primary ring
(b) The Secondary ring
(c) Both rings
(d) Neither ring

266. The ______layer of OSI model can use the railer of the frame for error detection.
(a) Physical (b) Data link
(c) Transport (d) Presentation

267. In a ______topology, if there are n devices in a network, each device has n-1 ports for cables.
(a) Mesh (b) Star
(c) Bus (d) Ring

268. Another name for Usenet is
(a) Gopher (b) Newsgroups
(c) Browser (d) CERN

269. The standard suit of protocols used by the Internet, Intranets, extranets and some other networks.
(a) TCP/IP
(b) Protocol
(c) Open system
(d) Internet work processor

270. State whether the following is True or False.
i) In bus topology, heavy Network traffic slows down the bus speed.
ii) It is multipoint configuration.
(a) True, True (b) True, False
(c) False, True (d) False, False

271. Which of the following is the logical topology?
(a) Bus (b) Tree
(c) Star (d) Both A and B

272. Which of the following is/ are the drawbacks of Ring Topology?
(a) Failure of one computer, can affect the whole network
(b) Adding or removing the computers disturbs the network activity.
(c) If the central hub fails, the whole network fails to operate.
(d) Both of A and B

273. Effective network mean that the network has fast delivery, timeliness and
(a) high bandwidth
(b) duplex transmission
(c) accurate transmission
(d) low bandwidth

274. Which one best describes the given statement:
"To allow multiple users to share total capacity of a transmission medium"
(a) congestion control
(b) exchange management
(c) multiplexing
(d) none of the above

275. Line configuration refers to the way two or more devices attach to a
(a) Link (b) Circuit
(c) Route (d) Node

276. Requires the maximum number of I/O ports.
(a) Bus (b) Star
(c) Mesh (d) Ring

277. Is used to define the direction of the signal flow between the linked devices.
(a) transmission mode
(b) transmission method
(c) transmission impairments
(d) none of the above

278. Trailer is only added at layer of OSI model.
(a) Data link (b) Physical
(c) Network (d) Application

279. A signal that repeats a pattern over a regular interval of time is called
(a) periodic signal
(b) analog signal
(c) composite signal
(d) none of the above

280. If there is in voltage then the frequency is infinite.
(a) instantaneous change
(b) continuous change
(c) no change
(d) none of the above

281. In a time-domain plot, the horizontal axis is measure of
(a) Signal amplitude
(b) Frequency
(c) Phase
(d) Time

282. ASK, PSK, FSK and QAM are examples of modulation.
(a) digital-to-digital
(b) digital-to-analog
(c) analog-to-analog
(d) analog-to-digital

283. The bit rate always equals the baud rate in which type of signal?
(a) FSK (b) QAM
(c) 4-PSK (d) PSK

284. Asynchronous transmission is
(a) Slow (b) costly
(c) Non-effective (d) fast

285. A converts an analog signal into a digital signal.
(a) Demodulator
(b) Modulator
(c) Digital-to-analog converter
(d) none of the above

286. If a station does not receive its signal up to a specified time that system issues an alarm to
(a) another node
(b) network manager
(c) switch
(d) Network analyzer

287. The information to be communicated in a data communications system is the
(a) Medium (b) Protocol
(c) Message (d) Transmission

288. Which is not an element of protocol
(a) semantics
(b) timing
(c) communication service module
(d) none of the above

289. Line configuration refers to the way two or more devices attach to a ______.
(a) Link (b) Circuit
(c) Route (d) Node

290. ______requires the maximum number of I/O ports.
(a) Bus (b) Star
(c) Mesh(d) Ring (d) none of the above

291. Which topology requires a central controller or hub?
(a) Mesh (b) Star
(c) Bus (d) Ring

292. Data synchronization is a function related with ______.
(a) session layer
(b) presentation layer
(c) transport
(d) none of the above

293. Frequency band in which 99% of the total power resides is called______.
(a) power bandwidth
(b) half power bandwidth
(c) 3dB bandwidth
(d) F.M.

294. In differential Manchester we require two transition or signal changes to represent binary______.
(a) zero
(b) one
(c) both zero and one
(d) none of the above

295. In Alternate mark inversion the term mark comes from______.
(a) telegraphy
(b) telephony
(c) digital telephony
(d) none of the above

296. A 56k modem can download at a rate of ______ Kbps and upload at a rate of ______ Kbps.
(a) 33.6: 3.6 (b) 33.6: .6
(c) 56.6: 3.6 (d) 56.6: .6

297. At the ______layer, a DCE takes data generated by a DTE.
(a) physical (b) transport
(c) data link (d) application

298. ______ requires more bandwidth.
(a) FSK (b) ASK
(c) PSK (d) QAM

299. Set of rules that govern communication is called
(a) OSI model (b) Protocol
(c) TCP/IP model (d) Datagram

300. Two devices are in network if
(a) A process in one device is able to exchange information with a process in another device
(b) a process is running on both devices
(c) PIDs of the processes running of different devices are same
(d) none of the mentioned

Answers

1. b	2. a	3. d	4. d	5. a	6. a	7. c	8. b	9. a
10. b	11. a	12. a	13. a	14. d	15. d	16. d	17. a	18. b
19. a	20. d	21. d	22. c	23. a	24. b	25. c	26. a	27. b
28. b	29. b	30. d	31. a	32. c	33. a	34. d	35. a	36. a
37. a	38. a	39. a	40. b	41. a	42. c	43. a	44. b	45. a
46. b	47. a	48. c	49. a	50. b	51. d	52. b	53. b	54. d
55. a	56. b	57. b	58. b	59. a	60. a	61. c	62. d	63. a
64. b	65. a	66. a	67. a	68. d	69. a	70. a	71. b	72. a
73. b	74. b	75. d	76. b	77. b	78. a	79. b	80. c	81. b
82. a	83. d	84. c	85. a	86. c	87. a	88. d	89. b	90. a
91. b	92. a	93. c	94. a	95. b	96. b	97. a	98. c	99. d
100. a	101. a	102. a	103. b	104. c	105. b	106. b	107. c	108. a
109. b	110. d	111. a	112. a	113. d	114. b	115. d	116. a	117. b
118. c	119. c	120. a	121. b	122. c	123. b	124. a	125. a	126. b
127. c	128. d	129. a	130. c	131. a	132. a	133. c	134. a	135. d
136. a	137. d	138. c	139. d	140. a	141. c	142. d	143. a	144. b
145. d	146. a	147. c	148. d	149. c	150. a	151. b	152. b	153. c
154. d	155. c	156. a	157. c	158. a	159. b	160. a	161. c	162. a
163. c	164. b	165. b	166. c	167. a	168. d	169. b	170. d	171. c
172. b	173. d	174. a	175. b	176. a	177. a	178. b	179. c	180. b
181. a	182. c	183. d	184. d	185. c	186. c	187. a	188. c	189. c
190. a	191. d	192. d	193. c	194. c	195. c	196. b	197. c	198. d
199. c	200. c	201. d	202. a	203. a	204. b	205. c	206. a	207. c
208. c	209. a	210. a	211. d	212. a	213. b	214. b	215. d	216. c
217. a	218. a	219. a	220. b	221. b	222. b	223. a	224. d	225. b
226. a	227. c	228. a	229. a	230. d	231. a	232. b	233. b	234. a
235. c	236. b	237. a	238. b	239. c	240. a	241. b	242. a	243. d
244. d	245. c	246. a	247. a	248. d	249. b	250. b	251. a	252. a
253. c	254. a	255. a	256. c	257. d	258. b	259. d	260. d	261. c
262. b	263. a	264. d	265. a	266. a	267. a	268. b	279. a	270. a
271. c	272. d	273. c	274. c	275. a	276. c	277. a	278. a	279. a
280. b	281. d	282. b	283. a	284. a	285. a	286. a	287. c	288. c
289. a	290. c	291. b	292. a	293. a	294. b	295. a	296. b	297. a
298. b	299. b	300. a						

Object Oriented Programming

1. Operator that cannot be overloaded?
(a) The relation operator (>=)
(b) Assignment operator (=)
(c) Script operator ([])
(d) Conditional operator (? :)

2. Which of the following would you most likely use to convert from a user-defined class to a basic type?
(a) a built-in conversion operator.
(b) a one-argument constructor.
(c) an overloaded = operator.
(d) a conversion operator that's a member of the class.

3. Which feature is needed to make a programming language object oriented?
(a) Encapsulation (b) Inheritance
(c) Polymorphism (d) All of the above

4. Using encapsulation we can achieve
(a) Information hiding
(b) Least interdependencies among modules
(c)Implementation independence
(d) All of given options

5. Inheritance is a way to
(a) make general classes into more specific classes
(b) pass arguments to objects of classes.
(c) improve data hiding and encapsulation.
(d) providing class growth through natural selection.

6. For classes with common behavior, you can save effort by placing the common behavior in a ______.
(a) Derived Class
(b) Base class
(c) Deprived Class
(d) Named class

7. A static member function cannot be declared.
(a) Static (b) Implicit
(c) Explicit (d) Virtual

8. A C++ class is similar to ______.
(a) Structure
(b) Header File
(c) Library File
(d) None of the given

9. Given the following class Base {into Age=33 ;} How you can improve above class with respect to accessing the field Age?
(a) Define the variable Age as private
(b) Define the variable Age as protected
(c) Define the variable Age as private and create a get method that returns it and a set method that updates it
(d) Define the variable Age as protected and create a set method that returns it and a get method that updates it

10. Suppose that the Test class does not have an overloaded assignment operator. What happens when an assignment a=b; is given for two Test objects a and b?
(a) The automatic assignment operator is used
(b) The copy constructor is used
(c) Compiler error
(d) Run-time error

11. What a derived class can add?
(a) New data members
(b) New member functions and New friend functions
(c) New constructors and destructor
(d) All of given

12. The concept of derived classes is involved in,
(a) inheritance (25)
(b) encapsulation
(c) structure
(d) array

13. Format flags may be combined using
(a) the bitwise OR operator (|)
(b) the logical OR operator (||)
(c) the bitwise AND operator (&)
(d) the logical AND operator (&&)

14. The use of the break statement in a switch statement is
(a) optional
(b) compulsory
(c) not allowed. It gives an error message
(d) to check an error

15. A generalization-specialization relation between classes are implemented using
(a) data hiding (b) friend classes
(c) encapsulation (d) inheritance

16. In OOP a class is an example of ______.
(a) Data Type
(b) Abstract Type
(c) User Defined Type
(d) None of the given

17. A class can be identified from a statement by ______.
(a) Noun (b) Pronoun
(c) Verb (d) Adverb

18. The members of a class that can be accessed without creating the object of the class is called
(a) Private member
(b) Data Member
(c) Public Member
(d) Static

19. Suppose there is an object of type Person, which of the following can be considered as one of its attributes
(a) Name
(b) Age
(c) Work
(d) Both Name and Age

20. What a derived class can add?
(a) New data members
(b) New member functions and New friend functions
(c) New constructors and destructor
(d) All of given

21. ________ is/are used to access information hidden within an object?
(a) Interface
(b) Private data members
(c) Private member functions
(d) Both public and private members

22. A static member function cannot be declared.
(a) Static (b) Implicit
(c) Explicit (d) Virtual

23. The technique in which we visualize our programming problems according to real life's problems is called ______
(a) structured programming
(b) object oriented Programming
(c) procedural programming
(d) non of the given

24. In object orientated programming, a class of objects can ______ properties from another class of objects
(a) Utilize (b) Borrow
(c) Inherit (d) Adopt

25. A C++ class is similar to ______.
(a) Structure (b) Header File
(c) Library File (d) None of the given

26. Suppose that the Test class does not have an overloaded assignment operator. What happens when an assignment a=b; is given for two Test objects a and b?
(a) The automatic assignment operator is used
(b) The copy constructor is used
(c) Compiler error
(d) Run-time error

27. A static member function can be called, even when a class is not ______.
(a) Declared (b) Define
(c) Instantiated (d) Called

28. ______ provide the facility to access the data member.
(a) accessor function
(b) private function
(c) inline function
(d) None of the given

29. The ______ relationship indicates that an object contains other objects.
(a) None of given (b) 'has-a'
(c) 'is-a' (d) 'be

30. Which one of the following features of OOP is used to derive a class from another?
(a) Encapsulation (b) Polymorphism
(c) Data hiding (d) Inheritance

31. ______ is a relationship
(a) Inheritance (b) Polymorphism
(c) Abstraction (d) Encapsulation

32. To expose a data member to the program, you must declare the data member in the ______ section of the class.
(a) common (b) exposed
(c) public (d) unrestricted

33. Which type of statement does not occur in computer programs?
(a) sequence (b) loop
(c) denial (d) selection

34. Which of the following members do get inherited but become private members in child class
(a) Public (b) Private
(c) Protected (d) All the above

35. At what point of time a variable comes into existence in memory is determined by its
(a) scope (b) storage class
(c) data type (d) all of the above

36. Which of the following cannot be declared static?
(a) Class (b) Object
(c) Functions (d) Both (a) & (b)

37. Which of the following are an advantage of OOP?
(a) OOP makes it easy to re-use the code
(b) It provides an ability to create one user defined data type by extending the other
(c) It provides the facility of defining Abstract data types through which real world entities can be defined better.
(d) All of the given options

38. Which construct is the source for the creation of an object?
(a) Destructor of the class
(b) New operator
(c) Delete operator
(d) Constructor of the class

39. When a variable is define as static in a class then all object of this class,
(a) have different copies of this variable
(b) have same copy of this variable
(c) cannot access this variable
(d) None of given

40. ______ remain in memory even when all objects of a class have been destroyed.
(a) Static variables
(b) Instance variable
(c) Primitive variables
(d) None of given

41. Given the following class Base {into Age=33 ;} How you can improve above class with respect to accessing the field Age
(a) Define the variable Age as private
(b) Define the variable Age as protected
(c) Define the variable Age as private and create a get method that returns it and a set method that updates it
(d) Define the variable Age as protected and create a set method that returns it and a get method that updates it

42. The life of sub object is not dependent on the life of master class in ______.
(a) Composition
(b) Aggregation
(c) Separation
(d) None of the given

43. Which one is not keyword in C++?
(a) operator (b) B_op
(c) const (d) None of given

44. ______ satisfy the condition of polymorphism
(a) Carbon (b) Diamond
(c) Coal (d) all of the given

45. A generalization-specialization relation between classes are implemented using
(a) data hiding (b) friend classes
(c) encapsulation (d) inheritance

46. In order to free the memory occupied by the object, we use ______.
(a) Constructor (b) Destructor
(c) Shallow Copy (d) Deep Copy

47. Which of the following is not an example of multiple inheritances?
(a) Mermaid
(b) Woman
(c) None of the given
(d) Amphibious Vehicle

48. A generic class showing all the common attributes and a behavior of other classes represents a ,very important feature in oop called ______
(a) Inheritance (b) Encapsulation
(c) Polymarphism (d) Abstraction

49. We can get only one unique value which can be used by all the objects of that class by the use of
(a) static variables
(b) dynamic variables
(c) instance variables
(d) data members

50. A member function having the same name as that of a class and a ~ sign with it is called,
(a) Constructor (b) Getter
(c) Setter (d) Destructor

51. We achieve independence of internal implementation from its external interface through ______
(a) Encapsulation
(b) Information Hiding
(c) Abstraction
(d) both encapsulation and information hiding

52. Which one of the following is not an object association?
(a) Simple Association
(b) Inheritance
(c) Aggregation
(d) Composition

53. We capture the object attributes and behavior in Object Oriented programming using ______.
(a) Class (b) Function
(c) Data Member (d) Instances

54. The return type of a constructor is of ______.
(a) Integer (b) Character
(c) Double (d) No type

55. Which one of the following terms best represents the statement given below, "Hiding details of an object from the other parts of a program"
(a) Obfuscation. (b) Data Mining.
(c) Compilation. (d) Encapsulation

56. The process of hiding unwanted details from users is called ______.
(a) Protection (b) Encapsulation
(c) Argumentation(d) Abstraction

57. A template provides a convenient way to make a family of
(a) variables and data members
(b) functions and classes
(c) classes and exceptions
(d) programs and algorithms

58. Which one of the following terms must relate to polymorphism?
(a) Static allocation
(b) Static typing
(c) Dynamic binding (How to program, page 1103) Click here for more detail
(d) Dynamic allocation

59. What is true about function templates?
(a) The compiler generates only one copy of the function template
(b) The compiler generates a copy of function respective to each type of data
(c) The compiler can only generate copy for the into type data
(d) None of the given.

60. Which of the following is the best approach if it is required to have more than one functions having exactly same functionality and implemented on different data types?
(a) Templates (b) Overloading
(c) Data hiding (d) Encapsulation

61. Which of the following are valid characters for a numeric literal constant?
a) a comma
b) a dollar sign ($)
c) a percent sign (%)
d) None of the above

62. Assume a class Derv that is privately derived from class Base. An object of class Derv located in main () can access
(a) public members of Derv.
(b) protected members of Derv.
(c) private members of Derv.
(d) protected members of Base.

63. In order to define a class template, the first line of definition must be:
(a) template <typename T>
(b) typename <template T>
(c) Template Class <ClassName>
(d) Class <Template T>

64. A function that changes the state of the cout object is called a (n) ______
(a) member (b) adjuster
(c) manipulator (d) operator

65. When the base class and the derived class have a member function with the same name, you must be more specific which function you want to call (using ______).
(a) scope resolution operator
(b) dot operator
(c) null operator
(d) Operator overloading

66. Non Template Friend functions of a class are friends of ______ instance/s of that class.
(a) All
(b) One specific
(c) All instances of one date type
(d) None of the given options

67. The find ( ) algorithm
(a) finds matching sequences of elements in two containers.
(b) finds a container that matches a specified container.
(c) takes iterators as its first two arguments.
(d) takes container elements as its first two arguments.

68. When a child class function is called, the compiler looks first for a matching function name in the ______.
(a) class of the object using the function name
(b) immediate ancestor class
(c) base class
(d) descendant class
(d) 3 for v and 11 for w.

69. Which of the following may not be an integral part of an object?
(a) State
(b) Behavior
(c) Protected data members
(d) All of given

70. Which is not the Advantage of inheritance?
(a) providing class growth through natural selection.
(b) facilitating class libraries.
(c) avoiding the rewriting of code.
(d) providing a useful conceptual framework.

71. Which of the following causes run time binding?
(a) Declaring object of abstract class
(b) Declaring pointer of abstract class
(c) Declaring overridden methods as non-virtual
(d) None of the given

72. A copy constructor is invoked when
(a) a function do not returns by value.
(b) an argument is passed by value.
(c) a function returns by reference.
(d) an argument is passed by reference.

73. By default the vector data items are initialized to ______.
(a) 0 (b) 0.0
(c) 1 (d) null

74. In Private ______ only member functions and friend classes or functions of a derived class can convert pointer or reference of derived object to that of parent object
(a) specialization (b) inheritance
(c) abstraction (d) composition

75. Which of the following is/are advantage[s] of generic programming?
(a) Reusability (b) Writability
(c) Maintainability (d) All of given

76. Template functions use ______ than ordinary functions.
(a) Greater Memory
(b) Lesser Memory
(c) Equal Memory
(d) None of the given options

77. A template argument is preceded by the keyword ______.
(a) vector (b) class
(c) template (d) type

78. Multiple inheritance can be of type
(a) Public (b) Private
(c) Protected (d) All of the given

79. A function call is resolved at run-time in ______.
(a) non-virtual member function.
(b) virtual member function.
(c) Both non-virtual member and virtual member function.
(d) None of given

80. Two important STL associative containers are ______ and ______.
(a) set, map
(b) sequence, mapping
(c) setmet, multipule
(d) sit, mat

81. An abstract class is useful when,
(a) we do not derive any class from it.
(b) there are multiple paths from one derived class to another.
(c) We do not want to instantiate its object.
(d) You want to defer the declaration of the class.

82. What is the correct value to return to the operating system upon the successful completion of a program?
(a) -1
(b) 1
(c) 0
(d) Programs do not return a value.

83. Default constructor is such constructor which either has no ______ or if it has some parameters these have ______ values
(a) Parameter, temporary
(b) Null, Parameter
(c) Parameter, default
(d) None of the given

84. In case of multiple inheritance a derived class inherits,
(a) Only the public member functions of its base classes
(b) Only the public data members of its base classes
(c) Both public data members and member functions of all its base classes
(d) Data members and member functions of any two base classes

85. A template argument is preceded by the keyword ______.
(a) vector (b) class
(c) template (d) type

86. Which of the following causes run time binding?
(a) Declaring object of abstract class
(b) Declaring pointer of abstract class
(c) Declaring overridden methods as non-virtual
(d) None of the given

87. Identify the correct way of declaring an object of user defined template class A for char type members?
(a) A< char > obj;
(b) <char>A obj;
(c) A obj<char>;
(d) Obj <char> A; 8

88. Template functions use ______ than ordinary functions.
(a) Greater Memory
(b) Lesser Memory
(c) Equal Memory
(d) None of the given options

89. Compiler performs ______ type checking to diagnose type errors,
(a) Static (b) Dynamic
(c) Bound (d) Unbound

90. Vectors contain contiguous elements stored as a [an] ______.
(a) variable (b) array
(c) function (d) data type

91. A function that is called automatically each time an object is destroyed is a
(a) constructor (b) destructor
(c) destroyer (d) terminator

92. In a de-queue,
(a) data can be quickly inserted or deleted at any arbitrary location.
(b) data can be inserted or deleted at any arbitrary location, but the process is relatively slow.
(c) data cannot be quickly inserted or deleted at either end.
(d) data can be inserted or deleted at either end, but the process is relatively slow.

93. Algorithms can only be implemented using STL containers.
(a) True (b) False

94. What is a class?
(a) A class is a section of computer memory containing objects.
(b) A class is a section of the hard disk reserved for object oriented programs
(c) A class is the part of an object that contains the variables.
(d) A class is a description of a kind of object.

95. Inheritance is a way to
(a) organize data.
(b) pass arguments to objects of classes.
(c) add features to existing classes without rewriting them.
(d) improve data-hiding and encapsulation.

96. We can use "this" pointer in the constructor in the body and even in the initialization list of any class if we are careful,
(a) True (b) False

97. ______ and ______ methods may not be declared abstract.
(a) private, static (b) private, public
(c) static, public (d) none of given

98. Public methods of base class can ______ be accessed in its derived class
(a) directly
(b) indirectly
(c) simultaneously
(d) none of the given

99. The type that is used to declare a reference or pointer is called its ______.
(a) default type
(b) static type
(c) abstract type
(d) reference type 11

100. ______ members are somewhere between public and private members. They are used in inheritance
(a) protected (b) public
(c) private (d) global

101. Which of these are examples of error handling techniques?
(a) Abnormal Termination
(b) Graceful Termination
(c) Return the illegal
(d) all of the given

102. ______ follow try block to catch the object thrown
(a) catch block
(b) throw block
(c) main block
(d) non of the given

103. Graphical representation of classes and objects is called object model it shows ______.
(a) Class Name only
(b) Class Name and attributes
(c) Relationships of the objects and classes
(d) all of the given

104. Destructor can be overloaded
(a) True (b) False

105. Which of the following causes run time binding?
(a) Declaring object of abstract class
(b) Declaring pointer of abstract class
(c) Declaring overridden methods as non-virtual
(d) None of the given

106. Each try block can have ______ no. of catch blocks.
(a) 1
(b) 2
(c) 3
(d) As many as necessary

107. When the compiler cannot differentiate between two overloaded constructors, they are called
(a) overloaded (b) destructed
(c) ambiguous (d) dubious

108. Suppose we have two derived classes from a single class, can we write a method with same name in both these derived classes? Choose the best option.
(a) No
(b) Only if the two classes have the same name
(c) Only if the main program does not declare both kinds
(d) Yes

109. Considering the resolution order in which compiler search for functions in a program; the first priority is given to; the first priority is given to,
(a) general template
(b) partial specialization
(c) complete specialization
(d) ordinary function (287)

110. In ______, a base class can be replaced by its derived class,
(a) Sub-typing
(b) Super-typing
(c) Multiple-typing
(d) Restricted-typing

111. Which of the following operator(s) take(s) one or no argument if overloaded?
(a) ++ (b) -
(c) + (d) All of the given

112. Which of the following operators cannot be overloaded?
(a) Scope resolution operator (::)
(b) Insertion operator (<<)
(c) Extraction operator (>>)
(d) The relation operator (>)

113. Which of these are examples of error handling techniques?
(a) Abnormal Termination
(b) Graceful Termination
(c) Return the illegal
(d) All of the given

114. ______ "is a" relationship
(a) Inheritance (b) Polymarphism
(c) abstraction (d) encapsulation

115. Virtual functions allow you to
(a) create an array of type pointer-to-base class that can hold pointers to derived classes.
(b) create functions that can never be accessed.
(c) group objects of different classes so they can all be accessed by the same function code.
(d) use the same function call to execute member functions of objects from different classes

116. Template functions use ______ than ordinary functions.
(a) Greater Memory
(b) Lesser Memory
(c) Equal Memory
(d) None of the given options

117. The copy ( ) algorithm returns an iterator to
(a) the last element copied from.
(b) the last element copied to.
(c) the element one past the last element copied from.
(d) the element one past the last element copied to.

118. If you design a class that needs special initialization tasks, you will want to design a (n) ______.
(a) housekeeping routine
(b) initializer
(c) constructor
(d) compiler

119. Which type of inheritance is being represented by the following statement, class X: public A, public B {... ...};
(a) Single inheritance
(b) Multiple inheritance
(c) Double inheritance
(d) None of the given options

120. The specialization pattern <T*> after the name says that this specialization is to be used for every,
(a) data type (b) meta type
(c) virtual type (d) pointer type

121. A range is often supplied to an algorithm by two ______ values.
(a) italic (b) iteration
(c) iterator (d) None of given 21

122. Which of the following is an integral part of an object?
(a) State (b) Behavior
(c) Unique identity(d) All of the given

123. Consider the following statement Cupboard has books. What is the relationship between Cupboard and books?
(a) Composition
(b) Aggregation
(c) Inheritance
(d) None of the given options

124. Which sentence clearly defines an object?
(a) one instance of a class.
(b) another word for a class.
(c) a class with static methods.
(d) a method that accesses class attributes.

125. ______, which means if A declares B as its friend it does NOT mean that A can access private data of B. It only means that B can access all data of A.
(a) Friendship is one way only
(b) Friendship is two way only
(c) NO Friendship between classes
(d) Any kind of friendship

126. The statement objA=objB; will cause a compiler error if the objects are of different classes.
(a) True (b) False

127. The newline character is always included between
(a) pair of parentheses
(b) pair of curly braces
(c) control string
(d) &

128. Function templates should be used where code and behavior must be identical.
(a) True (b) False

129. Consider the following statement
Cupboard has books
What is the relationship between Cupboard and books?
(a) Composition
(b) Aggregation
(c) Inheritance
(d) None of the given options

130. Identify the correct way of declaring an object of user defined template class A for char type members?
(a) A< char > obj;
(b) <char>A obj;
(c) A obj<char>;
(d) Obj <char> A;

131. The user must define the operation of the copy constructor.
(a) True (b) False

132. How the information hidden within an object can be accessed?
(a) Through its interface
(b) Through its private data members
(c) Through its private member functions
(d) Through both public and private members

133. The sub-object's life is not dependant on the life of master class in ______.
(a) Separation
(b) Composition
(c) Aggregation
(d) None of the given

134. Encapsulation means Select correct option:
(a) Extending the behavior of class in another class
(b) Data and behavior are tightly coupled within an entity (16)
(c) One entity takes all the attributes and operations of the other
(d) Taking out the common features and put those in a separate class

135. An STL container cannot be used to,
(a) Hold objects of class employee.
(b) Store elements in a way that makes them quickly accessible.
(c) Compile c++ programs.
(d) Organize the way objects are stored in memory 25

136. ______, which means if A declares B as its friend it does NOT mean that A can access private data of B. It only means that B can access all data of A.
(a) Friendship is one way only
(b) Friendship is two way only
(c) No Friendship between classes
(d) Any kind of friendship

137. Which of the following may not be an integral part of an object?
(a) Statpe
(b) Behavior
(c) Protected data members
(d) All of given

138. A normal C++ operator that acts in special ways on newly defined data types is said to be
(a) glorified. (b) encapsulated.
(c) classified. (d) overloaded.

139. A function that returns no values to the program that calls it is ______.
(a) not allowed in C++
(b) type void
(c) type empty
(d) type barren

140. What is an Object?
(a) A combination of message and data
(b) A combination of namespace
(c) A combination of task to be performed
(d) A combination of Array

141. What is an Encapsulation?
(a) An action or occurrence such as click
(b) A package of one or more components together
(c) A set of statement that performs specific task
(d) A reference type variable

142. Which of the following is example of encapsulation
(a) Steering wheel of the car
(b) Car
(c) Color of the car
(d) Music system of the car

143. Which of the following are not in composition in "Car as a system"
(a) Car and seat covers
(b) Car and music system
(c) Car and color
(d) Car and engine

144. Which of the following are in aggregation in "Mobile as a system"
(a) Operating system in mobile
(b) Charger of mobile
(c) External apps installed in mobile
(d) None

45. Which one is not the property related to "Car as an object"
(a) Color
(b) Max Speed
(c) Petrol/Diesel capacity
(d) All

146. States and districts have a:
(a) Bi-directional relation
(b) Uni-Directional relation
(c) It's not a relation
(d) None

147. Choose one of the following
(a) Struct is encapsulation
(b) Class is encapsulation
(c) Functions is encapsulation
(d) Both A&B

148. What is a class?
(a) An abstract representation of something with certain properties.
(b) A concrete representation of something with certain properties.
(c) An abstract representation of something with certain properties and abilities.
(d) A concrete representation of something with certain properties and abilities.

149. Polymorphism reduces the effort required to extend an object system by
(a) Coupling objects together more tightly
(b) Enabling a number of different operations to share the same name
(c) Making objects more dependent on one another
(d) Removing the barriers imposed by encapsulation.

150. Which is analogous to the floor plan of a house?
(a) Architectural design
(b) Component-level design
(c) Data design
(d) Interface design

151. Which is analogous to the detailed drawings of the access points and external utilities for a house?
(a) Architectural design
(b) Component-level design
(c) Data design
(d) Interface design

152. Which is analogous to a set of detailed drawings for each room in a house
(a) Architectural design
(b) Component-level design
(c) Data design
(d) Interface design

153. What is the default access specifier for a Top-level Class, which are not nested into other Classes?
(a) Public (b) Private
(c) Protected (d) Internal

154. What is the difference between Assignment and Initialization?
(a) Assignment can be done as many times as desired whereas initialization can be done only once.
(b) Assignment can be done only once whereas initialization can be done as many times as desired.
(c) Both are same
(d) None of the above

155. What modifiers may be used with top-level class?
(a) Public
(b) Abstract and final
(c) Both A & B
(d) Only B

156. What is inner class?
(a) Classes defined in other classes
(b) Classes defined in methods
(c) Both A & B
(d) Only A

157. What is anonymous class?
(a) Class defined inside a method without a name
(b) It is instantiated and declared in the same place and cannot have explicit constructors
(c) Both A & B
(d) Only A

158. What are the different creational patterns in OO design?
(a) Factory pattern & Single ton pattern
(b) Prototype pattern & Abstract factory pattern
(c) Both A & B
(d) Only A

159. What are the advantages of inheritance?
(a) It permits code reusability. Reusability saves time in program development.
(b) It encourages the reuse of proven and debugged high-quality software, thus reducing problem after a system becomes functional.
(c) Both A & B
(d) Only A

160. The relationship between a teacher & a student is
(a) Association (b) Aggregation
(c) Composition (d) None of these

161. The relationship between a teacher & a department is
(a) Association (b) Aggregation
(c) Composition (d) None of these

162. The relationship between a house & room is
(a) Association (b) Aggregation
(c) Composition (d) None of these

163. What is the difference between virtual functions and pure virtual functions?
(a) A virtual function must have a definition in the class in which it is declared. A pure virtual function does not provide a definition.
(b) A virtual function does not provide a definition. A pure virtual function must have a definition in the class in which it is declared.
(c) Both are same.
(d) None of these.

164. What is the difference between the terms fatal error and non–fatal error?
(a) A fatal error causes a program to terminate prematurely. A nonfatal error occurs when the logic of the program is incorrect, and the program does not work properly.
(b) A fatal error immediately lets you know there is a problem with the program, whereas a nonfatal error can be subtle and possibly go undetected.
(c) Both A & B
(d) Only A

165. The return data type of void means?
(a) A void area in memory is returned so that you can populate it.
(b) No data type is returned.
(c) Void is not a valid data type.
(d) None of the above

166. Which statements about the C# language are true?
(a) C# supports both procedural and object-oriented programming
(b) C# is only a procedural language.
(c) C# is only an Object-Oriented.
(d) None of the above.

167. Which statements are not correct about Objects?
(a) An Object is an instance of a class
(b) Objects can access both instance and static data
(c) All classes extend the Object class
(d) Objects do not permit encapsulation

168. If an attribute is private, which methods have access to it?
(a) Only those defined in the same class.
(b) Only static methods in the same class.
(c) Only instance methods in the same class.
(d) Only classes in the same package.

169. What is an aggregate object?
(a) An object instance that has only static methods.
(b) An object instance that has only primitive attributes.
(c) An object instance that contains other objects.
(d) An object that has only primitive attributes and instances methods.

170. If a class C is derived from class B, which is derived from class A, all through public inheritance, then a class C member function can access
(a) Protected and public data only in C and B
(b) Protected and public data only in C
(c) Private data in A and B
(d) Protected data in A and B

171. A class can have many methods with the same name, as long as the number of parameters is different. This is known as:
(a) Method Overloading
(b) Method Invocating
(c) Method Overriding
(d) Method Labeling

172. ______ is a blueprint or prototype that defines the variables and the methods common to all objects of a certain kind. Select the best word to complete this sentence.
(a) Class (b) Inheritance
(c) Polymorphism (d) Aggregation

173. (A/An) ______ is a contract in the form of a collection of method and constant declarations. When a class implements (a/an) ______, it promises to implement all of the methods declared in that ______. Select the best word to complete this sentence.
(a) Class (b) Interface
(c) Object (d) Exception

174. The phrase "is a" refers to the object-oriented concept of ______, and the phrase "has a" refers to the object-oriented concept of ______.
(a) Composition : Inheritance
(b) Composition : Polymorphism
(c) Polymorphism : Inheritance
(d) Inheritance : Composition

175. When using method overriding, which of the following is true?
(a) The number of parameters determines which version of an overridden method is invoked.
(b) The class determines which version of an overridden method is invoked.
(c) The method signature determines which version of an overridden method is invoked.
(d) The object reference determines which version of an overridden method is invoked

176. Analyze the following method signature and select the statement that must be true: private int some Method (int a, Object b, String c, char d)
(a) a is pass by reference, b is pass by value, c is pass by reference, and d is pass by value
(b) a is pass by value, b is pass by reference, c is pass by reference, and d is pass by value
(c) a is pass by reference, b is pass by reference, c is pass by reference, and d is pass by reference
(d) a is pass by reference, b is pass by value, c is pass by value, and d is pass by value

177. Object Oriented Programming
(a) makes programs more reliable.
(b) simulates real life.
(c) uses a lot of intimidating vocabulary, which is not as bad as it sounds.
(d) all of the above.

178. The actions in a C# class are called
(a) procedures. (b) functions.
(c) methods. (d) subroutines

179. Which of the following Math class features do not use as any parameters or arguments?
(a) PI (b) E
(c) Final (d) Both A and B

180. What is the value of result in the following statement? int result = Math.pow (3,4);
(a) 12 (b) 81
(c) 64 (d) None

181. A conditional statement is
(a) a program expression that evaluates to true or false.
(b) a program statement that requires input from the keyboard.
(c) any program statement with a binary operator.
(d) any program statement with an unary operator.

182. A class method call
(a) requires that the class identifier precedes the method identifier.
(b) may be called with the method identifier only in certain circumstances.
(c) is only possible after a new object is constructed.
(d) uses the class identifier only for readability.

183. Class methods are typically used when
(a) only a single copy of the class needs to be loaded
(b) multiple copies or instances of a class are required.
(c) it is not necessary to pass information to the methods.
(d) only return methods are used in a class.

184. Object methods are typically used when
(a) only a single copy of the class needs to be loaded
(b) multiple copies or instances of a class are required.
(c) it is not necessary to pass information to the methods.
(d) only return methods are used in a class.

185. Which of the following statements shows correct syntax to create an object of the Piggy class?
(a) Piggy new tom = Piggy();
(b) Piggy = new tom();
(c) Piggy tom = new Piggy();
(d) tom = new Piggy;

186. The Boolean expression (A && B) && !(A && B) evaluates to
(a) false in all cases.
(b) true in all cases.
(c) true whenever only A is true or only B is true.
(d) true whenever both A is true and B is true.

187. The do. while loop is ideal for loop structures that
(a) repeat some process a fixed number of times.
(b) must execute some process at least one time.
(c) must check the loop condition before the loop body is executed.
(d) do all of the above.

188. An array is a
(a) data structure with one, or more, elements of the same type.
(b) data structure with LIFO access.
(c) data structure, which allows transfer between internal and external storage.
(d) data structure with one, or more, elements, called fields, of the same or different data types.

189. A class
(a) is a user-defined data type.
(b) combines both data and the methods that act upon the data in the same module.
(c) is one instance of a more general data type.
(d) is both A and (b)

190. An object
(a) is a user-defined data type.
(b) combines both data and the methods that act upon the data.
(c) is one instance of a more general data type.
(d) is both A and (b)

191. The data in a class are also called
(a) attributes.
(b) instance variables.
(c) fields
(d) all of the above.

192. Methods are
(a) action modules that process data.
(b) class variables that store information.
(c) instances of a class.
(d) none of the above.

193. Instantiation is the moment that
(a) memory is allocated for a specific object of a class.
(b) memory is allocated for a specific object, which is a member of a class.
(c) a program is ready for execution.
(d) a program compiles correctly.

194. Object Oriented Programming is characterized by using
(a) encapsulation (b) inheritance
(c) polymorphism (d) all of the above

195. The scope of an object is the
(a) size of the memory allocated for an object.
(b) total number of data attributes used by an object.
(c) range of accessing member methods.
(d) period during which an object is defined and allocates memory to store values.

196. When simple data types are used for parameter passing,
(a) the actual current value of the simple data type's variable is copied.
(b) the initial value of the simple data type's variable is copied.
(c) the memory reference where the variable values are stored is copied.
(d) a new object of the data type is instantiated.

197. When objects are used for parameter passing,
(a) the current values of the data attributes of the object are copied.
(b) the initial values of the object instantiation information are copied.
(c) the memory reference where the object information is stored is copied.
(d) a new object of the same class as the parameter object is instantiated.

198. Information hiding is the concept of
(a) declaring all significant data as private.
(b) storing information in private data fields.
(c) thinking about programming features without concern about the implementation of these features.
(d) testing a program without using any actual data.

199. When is a constructor called?
(a) Each time the constructor identifier is used in a program statement
(b) During the declaration of a new object
(c) During the instantiation of a class
(d) At the beginning of any program execution

200. What is an overloaded constructor?
(a) A constructor with too many program statements.
(b) A second constructor with the same constructor heading as the first constructor.
(c) A second constructor with a different identifier than the first constructor.
(d) A second or other multiple constructor with a different signature than any other constructor.

201. Access to private data or private methods is
(a) restricted to methods of the same class.
(b) restricted to methods of other classes.
(c) available to methods of the same class and other classes.
(d) not an issue because the program will not compile.

202. Inheritance is the process of
(a) using classes in the established standard C# Language library.
(b) using features from an existing class.
(c) combining data and the methods, which process the data, inside the same module.
(d) dividing a program into multiple related files for each class in the program.

203. If a subclass has the same method identifier as a base class method,
(a) a compile error message will result.
(b) a logic error will result.
(c) the baseclass method will be used.
(d) the subclass method will be used.

204. The Boolean expression A >= B is equivalent to which of the following expressions?
(a) !(A > B) (b) !(B >= A)
(c) !(A < B) (d) A <= B

205. The Boolean expression (A and B) or A is true
(a) only when A is true.
(b) only when B is true.
(c) whenever either A is true or B is true.
(d) for all values of A and (b)

206. Which among the following is not true about interfaces?
(a) Interface can have properties
(b) Interface cannot have access modifiers
(c) Interface can have fields
(d) All the above

207. Suppose class A implements interface I1. The class explicitly implements a member of I1. How is it possible to access this member?
(a) through a class instance
(b) through an instance of interface
(c) Both the above
(d) None

208. Which among the following is true about the New keyword?
(a) Used to create objects on the heap and invoke instructors
(b) Used to hide an inherited member from a base class member
(c) 1 and 2 are true
(d) None

209. Which of the following languages is not a procedure-oriented programming language?
(a) ALGOL
(b) COBOL
(c) FORTRAN
(d) None of the above

210. Which of the following programming approach used functions as a key concept to perform action-oriented tasks?
(a) Structured programming
(b) Modular programming
(c) Procedure-oriented programming
(d) Object-oriented programming

211. Identify the drawback of using procedure-oriented programming, if any:
(a) Data is hidden from external functions
(b) New functions can be added whenever necessary
(c) Does not reflect real world problems
(d) All of the above

212. Which is not associated with Object-oriented programming?
(a) Data abstraction
(b) Automatic initialization
(c) Dynamic binding
(d) None

213. The term operator overloading in C++ refers to:
(a) Inheritance (b) Message passing
(c) Polymorphism (d) None

214. Which one of the following OOP concepts enables reusability of components?
(a) Inheritance (b) Encapsulation
(c) Polymorphism (d) All of the above

215. The concept of hierarchical classification is related to:
(a) Abstraction
(b) Inheritance
(c) Function overloading
(d) None

216. Which of the following is an Object-oriented programming language?
(a) Smalltalk (b) Object Pascal
(c) Java (d) All of the above

217. C++ was originally developed by
(a) Nicolas Wirth (b) Donald Knuth
(c) Bjarne Stroustrup (d) Ken Thompson

218. The standard C++ comment
(a) / (b) //
(c) /* and */ (d) None of these

219. The preprocessor directive #include is required if
(a) Console output is used
(b) Console input is used
(c) Both console input and output is used
(d) None of these

220. The operator << is called
(a) an insertion operator
(b) put to operator
(c) either a or b
(d) None of these

221. The operator >> is called
(a) an extraction operator
(b) a get from operator
(c) either a or b
(d) get to operator

222. The C++ symbol <<
(a) perform the action of sending the value of expression listed as its right to the outputs strewn as the left.
(b) is used to indicate the action from right to left
(c) is adopted to resemble an arrow
(d) All of above

223. When a language has the capability to produce new data type, it is called
(a) Extensible (b) Overloaded
(c) Encapsulated (d) Reprehensible

224. C++ name was suggested by
(a) Rrick Mascitti (b) Bjarne Stroustrup
(c) Donald Knuth (d) Ken Thompson

225. What is a reference?
(a) an operator
(b) a reference is an alias for an object
(c) used to rename an object
(d) None of these

226. State the object oriented languages
(a) C++ (b) Java
(c) Eiffel (d) All of the above

227. When a class serves as base class for many derived classes, the situation is called:
(a) polymorphism
(b) hierarchical inheritance
(c) hybrid inheritance
(d) multipath inheritance

228. When two or more classes serve as base class for a derived class, the situation is known as ______.
(a) multiple inheritance
(b) polymorphism
(c) encapsulation
(d) hierarchical inheritance

229. Multiple inheritance leaves room for a derived class to have ______ members.
(a) dynamic (b) private
(c) public (d) ambiguous

230. Which of the following approach help us understand better about Real time examples, say Vehicle or Employee of an Organization?
(a) Procedural approach
(b) Object Oriented approach
(c) Both a and b
(d) None of the mentioned

231. Which of the following Paradigm is followed by Object Oriented Language Design?
(a) Process-Oriented Model
(b) Data Controlling access to code.
(c) Both a and b
(d) None of the mentioned

232. Which of the following approach is followed by Object Oriented Language during the execution of a program?
(a) Bottom up approach
(b) Top down approach
(c) Both a and b
(d) None of the mentioned

233. Which of the following is/are advantage of using object oriented programming?
(a) Code Reusability
(b) Can create more than one instance of a class without interference
(c) Platform independent
(d) All of the mentioned

234. Java Compiler translates the source code into?
(a) Machine code (b) Assembly code
(c) Byte code (d) JVM code

235. Which of the following is called as 'Compilation unit'?
(a) Object file
(b) Byte code
(c) Source file
(d) All of the mentioned

236. Which is a named memory location assigned a value by the program?
(a) variable
(b) literal
(c) identifier
(d) None of the mentioned

237. What does your class can hold?
(a) data
(b) functions
(c) both a & b
(d) none of the mentioned

238. How many specifiers are present in access specifiers in class?
(a) 1 (b) 2
(c) 3 (d) 4

239. Which is used to define the member of a class externally?
(a) :
(b) ::
(c) #
(d) none of the mentioned

240. Which other keywords are also used to declare the class other than class?
(a) struct (b) union
(c) object (d) both a & b

241. A friend function to a class, C cannot access
(a) Private data members and member functions
(b) Public data members and member functions
(c) Protected data members and member functions
(d) The data members of the derived class of C

242. A blueprint for a software object is called a
(a) Object (b) Class
(c) Instance (d) None of these

243. Use of virtual functions implies
(a) Overloading (b) Overriding
(c) Static binding (d) Dynamic binding

244. A class which can use all the features of an established class, is
(a) A static class
(b) A super class
(c) A subclass
(d) Overloaded

245. Which is true about objects?
(a) Objects are used to create classes.
(b) Objects are analogous to blueprints.
(c) Objects combine actions and data.
(d) Both a and b.

246. The term instantiation refers to the creation of:
(a) a class from a blueprint.
(b) an object from a class
(c) a method from an object.
(d) a property from a method.

247. An object is composed of:
(a) properties (b) methods.
(c) events. (d) All of the above.

248. Which statement about objects is true?
(a) One object is used to create one class.
(b) One class is used to create one object.
(c) One object can create many classes.
(d) One class can create many objects.

249. With polymorphism:
(a) one method can have multiple names.
(b) one object can have multiple names.
(c) many methods can share the same name.
(d) many objects can share the same name.

250. Polymorphism can apply to:
(a) math operators (b) method names.
(c) object names (d) Both a and b.

Answers

1. d	2.	3. d	4. a	5. a	6. b	7. d	8. a	9. c
10. b	11. d	12. a	13. a	14. a	15. d	16. c	17. a	18. c
19. d	20. d	21. c	22. d	23. b	24. c	25.	26. b	27. c
28. a	29. a	30. d	31. a	32. c	33. c	34. b	35. b	36. d
37 d	38. b	39. b	40. a	41. c	42. b	43. b	44. d	45. d
46. b	47. b	48. a	49. a	50. d	51. c	52. b	53. a	54. d
55. d	56. b	57. b	58. c	59. b	60. a	61. d	62. a	63. a
64. c	65. d	66. a	67. c	68. a	69. d	70. c	71. c	72. b
73. a	74. b	75. d	76. b	77. b	78. d	79. b	80. a	81. c
82. c	83. c	84. c	85. b	86. c	87. a	88. b	89. a	90. b
91. b	92. b	93. b	94. d	95. c	96. a	97. a	98.	99. b
100. a	101. d	102. a	103. d	104. b	105. c	106. d	107. c	108. b
109. d	110. a	111. a	112. a	113. d	114. a	115. d	116. b	117. d
118. c	119. b	120. d	121. b	122. d	123. b	124. a	125. a	126. b
127. c	128. a	129. b	130. a	131. a	132. c	133. c	134. b	135. a
136. a	137. c	138. d	139. b	140. a	141. b	142. b	143. b	144. b
145. d	146. a	147. d	148. c	149. b	150. a	151. d	152. b	153. d
154. a	155. c	156. c	157. c	158. c	159. c	160. a	161. b	162. c
163. a	164. c	165. a	166. a	167. d	168. a	169. c	170. d	171. a
172. a	173. b	174. d	175. b	176. b	177. b	178. c	179. c	180. d
181. a	182. b	183. b	184. a	185. c	186. a	187. b	188. a	189. d
190. c	191. c	192. a	193. a	194. d	195. c	196. a	197. a	198. b
199. c	200. d	201. b	202. b	203. d	204. c	205. a	206. c	207. b
208. c	209. d	210. c	211. c	212. d	213. c	214. a	215. b	216. d
217. c	218. b	219. c	220. c	221. c	222. d	223. a	224. a	225. b
226. d	227. b	228. a	229. d	230. b	231. b	232. a	233. d	234. c
235. c	236. a	237. c	238. c	239. b	240. d	241. d	242. b	243. d
244. c	245. c	246. b	247. d	248. d	249. c	250. d		

DBMS

1. Each tuple is divided into fields in a relational schema, called
(a) Relations (b) Domains
(c) Queries (d) All of the above

2. Which of the following is not a component of the relational database environment?
(a) users (b) separate files
(c) database (d) query languages

3 An audit trail
(a) is used to make backup copies
(b) is the recorded history of operations performed on a file
(c) can be used to restore lost information
(d) none of the above

4. Database management systems are intended to
(a) eliminate data redundancy
(b) establish relationship among records in different files
(c) maintain data integrity
(d) all of the above

5. One approach to standardization storirg of data?
(a) MIS
(b) structured programming
(c) CODASYL specification
(d) none of the above

6. The language used application programs to request data from the DBMS is referred to as the
(a) DML
(b) DDL
(c) query language
(d) any of the above

7. The highest level in the hierarchy of data organization is called
(a) data bank (b) data base
(c) data file (d) data record

8. Choose the RDBMS which supports full-fledged client server application development
(a) dBase V (b) Oracle 7.1
(c) FoxPro 2.1 (d) Ingress

9. A set of programs that handle a firm's database responsibilities is called
(a) database management system (DBMS)
(b) database processing system (DBPS)
(c) data management system (DMS)
(d) all of above

10. Which is the make given to the database management system which is able to handle full text data, image data, audio and video?
(a) full media (b) graphics media
(c) multimedia (d) hypertext

11. A record management system
(a) can handle many files of information at a time
(b) can be used to extract information stored in a computer file
(c) always uses a list as its model
(d) both a and b

12. A command that lets you change one or more fields in a record is
(a) insert (b) modify
(c) lookup (d) none of above

13. A transparent DBMS
(a) cannot hide sensitive information from users
(b) keeps its logical structure hidden from users
(c) keeps its physical structure hidden from users
(d) both b and c

14. A file produced by a spreadsheet
(a) is generally stored on disk in an ASCII text format
(b) can be used as is by the DBMS
(c) both a and b
(d) none of the above

15. Which of the following is not true of the traditional approach to information processing
(a) there is common sharing of data among the various applications
(b) it is file oriented
(c) programs are dependent on the file
(d) it is inflexible

16. In an E-R diagram attributes are represented by
(a) rectangle (b) square.
(c) ellipse (d) triangle.

17. In case of entity integrity, the primary key may be
(a) not Null
(b) Null
(c) both Null & not Null.
(d) any value.

18. The language used in application programs to request data from the DBMS is referred to as the
(a) DML (b) DDL
(c) VDL (d) SDL

19. A logical schema
(a) is the entire database.
(b) is a standard way of organizing information into accessible parts.
(c) describes how data is actually stored on disk.
(d) both [a] and [c]

20. Related fields in a database are grouped to form a
(a) data file (b) data record.
(c) menu (d) bank.

21. The database environment has all of the following components except:
(a) users.
(b) separate files.
(c) database.
(d) database administrator.

22. A relational database developer refers to a record as
(a) a criteria (b) a relation.
(c) a tuple (d) an attribute.

23. The relational model feature is that there
(a) is no need for primary key data.
(b) is much more data independence than some other database models.
(c) are explicit relationships among records.
(d) are tables with many dimensions.

24. Conceptual design
(a) is a documentation technique.
(b) needs data volume and processing frequencies to determine the size of the database.
(c) involves modelling independent of the DBMS.
(d) is designing the relational model.

25. The method in which records are physically stored in a specified order according to a key field in each record is
(a) hash. (b) direct.
(c) sequential. (d) all of the above.

26. A subschema expresses
(a) the logical view.
(b) the physical view.
(c) the external view.
(d) all of the above.

27. Count function in SQL returns the number of
(a) values. (b) distinct values.
(c) groups. (d) columns.

28. An advantage of the database management approach is
(a) data is dependent on programs.
(b) data redundancy increases.
(c) data is integrated and can be accessed by multiple programs.
(d) none of the above.

29. A DBMS query language is designed to
(a) support end users who use English-like commands.
(b) support in the development of complex applications software.
(c) specify the structure of a database.
(d) all of the above.

30. Report generators are used to
(a) store data input by a user
(b) retrieve information from files
(c) answer queries
(d) both b and c

31. A form defined
(a) where data is placed on the screen
(b) the width of each field
(c) both a and b
(d) none of the above

32. A top-to-bottom relationship among the items in a database is established by a
(a) hierarchical schema
(b) network schema
(c) relational schema
(d) all of the above

33 The management information system (MIS) structure with one main computer system is called a
(a) hierarchical MIS structure
(b) distributed MIS structure
(c) centralized MIS structure
(d) decentralized MIS structure

34. In the relational modes, cardinality is termed as:
(a) Number of tuples.
(b) Number of attributes.
(c) Number of tables.
(d) Number of constraints.

35. Relational calculus is a
(a) Procedural language.
(b) Non-Procedural language.
(c) Data definition language.
(d) High level language.

36. The view of total database content is
(a) Conceptual view
(b) Internal view
(c) External view
(d) Physical View

37. Cartesian product in relational algebra is
(a) a Unary operator.
(b) a Binary operator.
(c) a Ternary operator.
(d) not defined.

38. DML is provided for
(a) Description of logical structure of database.
(b) Addition of new structures in the database system.
(c) Manipulation & processing of database.
(d) Definition of physical structure of database system.

39. 'AS' clause is used in SQL for
(a) Selection operation.
(b) Rename operation.
(c) Join operation.
(d) Projection operation.

40. ODBC stands for
(a) Object Database Connectivity.
(b) Oral Database Connectivity.
(c) Oracle Database Connectivity.
(d) Open Database Connectivity.

41. In the architecture of a database system external level is the
(a) physical level
(b) logical level
(c) conceptual level
(d) view level

42. A n entity set that does not have sufficient attributes to form a primary key is a
(a) strong entity set.
(b) weak entity set.
(c) simple entity set.
(d) primary entity set.

43. In a Hierarchical model records are organized as
(a) Graph. (b) List.
(c) Links. (d) Tree.

44. Transaction processing is associated with everything below except
(a) producing detail, summary, or exception reports.
(b) recording a business activity.
(c) confirming an action or triggering a response.
(d) maintaining data

45. It is possible to define a schema completely using
(a) VDL and DDL (b) DDL and DML
(c) SDL and DDL (d) VDL and DML

46. The method of access which uses key transformation is known as
(a) direct. (b) hash.
(c) random. (d) sequential.

47. Data independence means
(a) data is defined separately and not included in programs.
(b) programs are not dependent on the physical attributes of data.
(c) programs are not dependent on the logical attributes of data.
(d) both (b) and (c)

48. The statement in SQL which allows to change the definition of a table is
(a) Alter. (b) Update.
(c) Create. (d) select.

49. The language which has recently become the defacto standard for interfacing application programs with relational database system is
(a) Oracle. (b) SQL.
(c) DBase. (d) 4GL

50. The way a particular application views the data from the database that the application uses is a
(a) module. (b) relational model.
(c) schema. (d) sub schema.

51. In an E-R diagram an entity set is represent by a
(a) rectangle (b) ellipse.
(c) diamond box (d) circle.

52. A report generator is used to
(a) update files.
(b) print files on paper.
(c) data entry.
(d) delete files.

53. The property / properties of a database is / are:
(a) It is an integrated collection of logically related records.
(b) It consolidates separate files into a common pool of data records.
(c) Data stored in a database is independent of the application programs using it.
(d) All of the above.

54. The DBMS language component which can be embedded in a program is
(a) The data definition language (DDL).
(b) The data manipulation language (DML).
(c) The database administrator (DBA)
(d) A query language.

55. E-R model uses this symbol to represent weak entity set?
(a) Dotted rectangle.
(b) Diamond
(c) Doubly outlined rectangle
(d) None of these

56. SET concept is used in:
(a) Network Model
(b) Hierarchical Model
(c) Relational Model
(d) None of these

57. Relational Algebra is
(a) Data Definition Language.
(b) Meta Language
(c) Procedural query Language
(d) None of the above

58. Key to represent relationship between tables is called
(a) Primary key
(b) Secondary Key
(c) Foreign Key
(d) None of these

59. ______ produces the relation that has attributes of R1 and R2
(a) Cartesian product
(b) Difference
(c) Intersection
(d) Product

60. The file organization that provides very fast access to any arbitrary record of a file is
(a) Ordered file (b) Unordered file
(c) Hashed file (d) B-tree

61. DBMS helps achieve
(a) Data independence
(b) Centralized control of data
(c) Neither [a] nor (b)
(d) both [a] and (b)

62. Which of the following are the properties of entities?
(a) Groups (b) Table
(c) Attributes (d) Switchboards

63. Which of the following is correct:
(a) a SQL query automatically eliminates duplicates.
(b) SQL permits attribute names to be repeated in the same relation.
(c) a SQL query will not work if there are no indexes on the relations
(d) None of these

64. Architecture of the database can be viewed as
(a) two levels. (b) four levels.
(c) three levels. (d) one level.

65. In a relational model, relations are termed as
(a) Tuples. (b) Attributes
(c) Tables. (d) Rows.

66. The database schema is written in
(a) HLL (b) DML
(c) DDL (d) DCL

67. The ascending order of a data hierarchy is
(a) bit-byte-record-field-file-database
(b) byte-bit-field-record-file-database
(c) bit-byte-field-record-file-database
(d) bit-byte-file-record-field-database

68. Which of the following is true of a network structure?
(a) It is a physical representation of the data
(b) It allows a many-to-many relationship
(c) It is conceptually simple
(d) It will be dominant data base of the future

69. Which of the following hardware component is the most important to the operation of database management system?
(a) high resolution video display
(b) printer
(c) high speed, large capacity disk
(d) plotter

70. Batch processing is appropriate if
(a) large computer system is available
(b) only a small computer system is available
(c) only a few transactions are involved
(d) none of the above

71. Large collection of files are called
(a) fields (b) records
(c) database (d) sectors

72. Which of the following is not a relational database?
(a) dBase IV (b) 4th Dimension
(c) FoxPro (d) Reflex

73 In order to use a record management system
(a) you need to understand the low level details of how information is stored
(b) you need to understand the model the record management system uses
(c) bother a and b
(d) none of the above

74. Sort/Report generators
(a) are faster than index/report generators
(b) require more disk space than indexed/report generators
(c) do not need to sort before generating report
(d) both a and b

75. If a piece of data is stored in two places in the database, then
(a) storage space is wasted
(b) changing the data in one spot will cause data inconsistency
(c) in can be more easily accessed
(d) both a and b

76. Which of the following is a problem of file management system?
(a) difficult to update
(b) lack of data independence
(c) data redundancy
(d) all of above

77. One data dictionary software package is called
(a) DB/DC dictionary
(b) TOTAL
(c) ACCESS
(d) Datapac

78. The function of a database is...
(a) to check all input data
(b) to check all spelling
(c) to collect and organize input data
(d) to output data

79. What is the language used by most of the DBMSs for helping their users to access data?
(a) High level language
(b) SQL
(c) Query Language
(d) 4GL

80. The model for a record management system might be
(a) handwritten list
(b) a Rolodex card file
(c) a business form
(d) all of above

81. Primitive operations common to all record management system include
(a) print (b) sort
(c) look-up (d) all of above

82. The options like Relationship, SQL Server et(c) are found in
(a) External data tab
(b) Database tools tab
(c) Create tab
(d) Home tab

83. Information can be transferred between the DBMS and a
(a) spreadsheet program
(b) word processor program
(c) graphics program
(d) all of the above

84. Which of the following fields in a student file can be used as a primary key?
(a) class
(b) Social Security Number
(c) GPA
(d) Major

85. Which of the following is not an advantage of the database approach
(a) Elimination of data redundancy
(b) Ability of associate deleted data
(c) increased security
(d) all of the above

86. Which of the following contains a complete record of all activity that affected the contents of a database during a certain period of time?
(a) report writer
(b) query language
(c) data manipulation language
(d) transaction log

87. In the DBMS approach, application programs perform the
(a) storage function
(b) processing functions
(c) access control
(d) all of the above

88. It is better to use files than a DBMS when there are
(a) Stringent real-time requirements.
(b) Multiple users wish to access the data .
(c) Complex relationships among data
(d) All of the above.

89. The conceptual model is
(a) dependent on hardware.
(b) dependent on software.
(c) dependent on both hardware and software
(d) independent of both hardware and software.

90. What is a relationship called when it is maintained between two entities?
(a) Unary (b) Binary
(c) Ternary (d) Quaternary

91. Which of the following operation is used if we are interested in only certain columns of a table?
(a) PROJECTION
(b) SELECTION
(c) UNION
(d) JOIN

92. Which of the following is a valid SQL type?
(a) CHARACTER
(b) NUMERIC
(c) FLOAT
(d) All of the above

93. The RDBMS terminology for a row is
(a) tuple. (b) relation.
(c) attribute. D) degree.

94. Which of the following operations need the participating relations to be union compatible?
(a) UNION
(b) INTERSECTION
(c) DIFFERENCE
(d) All of the above

95. The full form of DDL is
(a) Dynamic Data Language
(b) Detailed Data Language
(c) Data Definition Language
(d) Data Derivation Language

96. Which of the following is an advantage of view?
(a) Data security
(b) Derived columns
(c) Hiding of complex queries
(d) All of the above

97. Which of the following is a legal expression in SQL?
(a) Select null from employee;
(b) Select name from employee;
(c) Select name from employee where salary null;
(d) None of the above

98. The users who use easy-to-use menu are called
(a) Sophisticated end users
(b) Naïve users
(c) Stand-alone users
(d) Casual end users.

99. Which database level is closest to the users?
(a) External (b) Internal
(c) Physical (d) Conceptual

100. Which are the two ways in which entities can participate in a relationship?
(a) Passive and active
(b) Total and partial
(c) Simple and Complex
(d) All of the above

101. The result of the UNION operation between R1 and R2 is a relation that includes
(a) all the tuples of R1
(b) all the tuples of R2.
(c) all the tuples of R1 and R2
(d) all the tuples of R1 and R2 which have common columns

102. Which of the following is a comparison operator in SQL?
(a) =
(b) LIKE
(c) BETWEEN
(d) All of the above

103. A set of possible data values is called
(a) attribute. (b) degree.
(c) tuple. (d) domain.

104. Which of the operations constitute a basic set of operations for manipulating relational data?
(a) Predicate calculus
(b) Relational calculus
(c) Relational algebra
(d) None of the above

105. Which of the following is another name for weak entity?
(a) Child (b) Owner
(c) Dominant (d) All of the above

106. Which of the following database object does not physically exist?
(a) base table
(b) index
(c) view
(d) none of the above

107. NULL is
(a) the same as 0 for integer
(b) the same as blank for character
(c) the same as 0 for integer and blank for character
(d) not a value

108. Which of the following is record based logical model?
(a) Network Model
(b) Object oriented model
(c) E-R Model
(d) None of these

109. A data dictionary is a special file that contains:
(a) The name of all fields in all files.
(b) The width of all fields in all files.
(c) The data type of all fields in all files.
(d) All of the above.

110. A file manipulation command that extracts some of the records from a file is called
(a) Select (b) Project
(c) Join (d) Product

111. The physical location of a record is determined by a mathematical formula that transforms a file key into a record location is:
(a) B-Tree File (b) Hashed File
(c) Indexed File (d) Sequential file.

112. In E-R Diagram derived attribute are represented by
(a) Ellipse (b) Dashed ellipse
(c) Rectangle (d) Triangle

113. Cross Product is a:
(a) Unary Operator
(b) Ternary Operator
(c) Binary Operator
(d) Not an operator

114. An instance of relational schema R (A, B, C) has distinct values of A including NULL values. Which one of the following is true?
(a) A is a candidate key
(b) A is not a candidate key
(c) A is a primary Key
(d) Both [a] and (c)

115. Consider the join of a relation R with relation S. If R has m tuples and S has n tuples, then the maximum size of join is:
(a) mn (b) m+n
(c) (m+n)/2 (d) 2(m+n)

116. The natural join is equal to:
(a) Cartesian Product
(b) Combination of Union and Cartesian product
(c) Combination of selection and Cartesian product
(d) Combination of projection and Cartesian product

117. Which one of the following is not true for a view?
(a) View is derived from other tables.
(b) View is a virtual table.
(c) A view definition is permanently stored as part of the database.
(d) View never contains derived columns.

118. In E-R Diagram relationship type is represented by
(a) Ellipse (b) Dashed ellipse
(c) Rectangle (d) Diamond

119. Hierarchical model is also called
(a) Tree structure
(b) Plex Structure
(c) Normalize Structure
(d) Table Structure

120. To delete a particular column in a relation the command used is:
(a) UPDATE (b) DROP
(c) ALTER (d) DELETE

121. The ______ operator is used to compare a value to a list of literals values that have been specified.
(a) BETWEEN (b) ANY
(c) IN (d) ALL

122. A logical schema
(a) is the entire database
(b) is a standard way of organizing information into a accessible part
(c) describe how data is actually stored on disk
(d) none of these

123. A B-tree of order m has maximum of ______ children
(a) m (b) m+1
(c) m- (d) m/2

124. ______ function divides one numeric expression by another and returns the remainder.
(a) POWER (b) MOD
(c) ROUND (d) REMAINDER

125. A data manipulation command the combines the records from one or more tables is called
(a) SELECT (b) PROJECT
(c) JOIN (d) PRODUCT

126. In E-R diagram generalization is represented by
(a) Ellipse (b) Dashed ellipse
(c) Rectangle (d) Triangle

127. ______ is a virtual table that draws its data from the result of a n SQL SELECT statement.
(a) View (b) Synonym
(c) Sequence (d) Transaction

128. The method of access which uses key transformation is known as
(a) Direct (b) Hash
(c) Random (d) Sequential

129. A table joined with itself is called
(a) Join (b) Self Join
(c) Outer Join (d) Equi Join

130. ______ data type can store unstructured data
(a) RAW (b) CHAR
(c) NUMERIC (d) VARCHR

131. A Database Management System (DBMS) is
(a) Collection of interrelated data
(b) Collection of programs to access data
(c) Collection of data describing one particular enterprise
(d) All of the above

132. Which of the following is not a level of data abstraction?
(a) Physical Level (b) Critical Level
(c) Logical Level (d) View Level

133. Disadvantages of File systems to store data is:
(a) Data redundancy and inconsistency
(b) Difficulty in accessing data
(c) Data isolation
(d) All of the above

134. In an Entity Relationship Diagram Rectangles represents
(a) Entity sets (b) Attributes
(c) Database (d) Tables

135. Which of the following is not a Storage Manager Component?
(a) Transaction Manager
(b) Logical Manager
(c) Buffer Manager
(d) File Manager

136. Data Manipulation Language enables users to
(a) Retrieval of information stored in database
(b) Insertion of new information into the database
(c) Deletion of information from the database
(d) All of the above

137. Which of the following is not an Schema?
(a) Database Schema
(b) Physical Schema
(c) Critical Schema
(d) Logical Schema

138. Which of the following is Database Language?
(a) Data Definition Language
(b) Data Manipulation Language
(c) Query Language
(d) All of the above

139. Which of the following in not a function of DBA?
(a) Network Maintenance
(b) Routine Maintenance
(c) Schema Definition
(d) Authorization for data access

140. Which of the following is a Data Model?
(a) Entity Relationship model
(b) Relational data model
(c) Object Based data model
(d) All of the above

141. Which of the following represents a relationship among a set of values.
(a) A Row (b) A Table
(c) A Field (d) A Column

142. Column header is refer as
(a) Table (b) Relation
(c) Attributes (d) Domain

143. In mathematical term Table is referred as
(a) Relation (b) Attribute
(c) Tuple (d) Domain

144. In mathematical term Row is referred as
(a) Relation (b) Attribute
(c) Tuple (d) Domain

145. _____ allow us to identify uniquely a tuple in the relation.
(a) Super key (b) Domain
(c) Attribute (d) Schema

146. Minimal Super keys are called
(a) Schema keys
(b) Candidate keys
(c) Domain keys
(d) Attribute keys

147. Which of the following is not Modification of the Database
(a) Deletion (b) Insertion
(c) Sorting (d) Updating

148. Which of the following is Relation-algebra Operation
(a) Select (b) Union
(c) Rename (d) All of the above

149. Which of the following in not Outer join?
(a) Left outer join
(b) Right outer join
(c) Full outer join
(d) All of the above

150. Which of the following is not an Aggregate function?
(a) Min (b) Max
(c) Select (d) Avg

151. The attribute that can be divided into other attributes is called
(a) Simple Attribute
(b) Composite Attribute
(c) Multi-valued Attribute
(d) Derived Attribute

152. In an Entity-Relationship Diagram “ Ellipses” represents
(a) Attributes
(b) Weak entity set
(c) Relationship sets
(d) Multi-valued attributes

153. In an Entity-Relationship Diagram “ Diamonds ” represents
(a) Attributes
(b) Multi-valued attributes
(c) Weak entity set
(d) Relationship sets

154. If every non-key attribute is functionally dependent on the primary key, the relation will be in
(a) First Normal Form
(b) Second Normal Form
(c) Third Normal Form
(d) Fourth Formal Form

155. Database locking concept is used to solve the problem of
(a) Lost Update
(b) Uncommitted Dependency
(c) Inconsistent Data
(d) All of the above

156. UML is stands for
(a) Universal Modeling Language
(b) Unified Modeling Language
(c) United Modeling Language
(d) Uni Modeling Language

157. Data Manipulation Language (DML) is not to
(a) Create information table in the Database
(b) Insertion of new information into the Database
(c) Deletion of information in the Database
(d) Modification of information in the Database

158. Which of the following option is use to retrieval of data?
(a) Stack (b) Data Structure
(c) Linked list (d) Query

159. ODBC stands for ______.
(a) Offline database connection
(b) Oriented database connection
(c) Open database connection
(d) None of above

160. Which algebra is widely used in DBMS?
(a) Relational algebra
(b) Arithmetic algebra
(c) Both
(d) None

161. Which of the following is a unary operation?
(a) Selection operation
(b) Generalized selection
(c) Primitive operation
(d) Projection operation

162. Which SQL Query is use to remove a table and all its data from the database?
(a) Create Table (b) Alter Table
(c) Drop Table (d) None of these

163. In precedence of set operators the expression is evaluated from:
(a) Left to Left (b) Left to Right
(c) Right to Right (d) Right to Left

164. In DBMS FD stands for ______.
(a) Facilitate data
(b) Functional data
(c) Facilitate dependency
(d) Functional dependency

165. How many types of keys in Database Design?
(a) Candidate key (b) Primary key
(c) Foreign key (d) All of these

166. Which of the following is based on Multi Valued Dependency?
(a) First (b) Second
(c) Third (d) Fourth

167. Which of the following is the structure of the Database?
(a) Table (b) Schema
(c) Relation (d) None of these

168. The minimal set of super key is called
(a) Primary key (b) Secondary key
(c) Candidate key (d) Foreign key

169. A relation that has no partial dependencies is in which normal form
(a) First (b) Second
(c) Third (d) BCNF

170. A functional dependency between two or more non-key attributes is called
(a) Transitive dependency
(b) Partial transitive dependency
(c) Functional dependency
(d) Partial functional dependency

171. A logical description of some portion of database that is required by a user to perform task is called as
(a) System View (b) User View
(c) Logical View (d) Data View

172. ______ is a classical approach to database design?
(a) Left -Right approach
(b) Right -Left approach
(c) Top -Down approach
(d) Bottom -Up approach

173. ______ refers to the correctness and completeness of the data in a database?
(a) Data security
(b) Data integrity
(c) Data constraint
(d) Data independence

174. A table that displays data redundancies yields ______ anomalies
(a) Insertion (b) Deletion
(c) Update (d) All of the above

175. A lock that allows concurrent transactions to access different rows of the same table is known as a
(a) Field-level lock
(b) Row-level lock
(c) Tablc-level lock
(d) Database-level lock

176. A type of query that is placed within a WHERE or HAVING clause of another query is called
(a) Super query (b) Sub query
(c) Master query (d) Multi-query

177. A transaction completes its execution is said to be
(a) Saved (b) Loaded
(c) Rolled (d) Committed

178. DBMS is a collection of ______ that enables user to create and maintain a database.
(a) Keys
(b) Translators
(c) Program
(d) Language Activity

179. In a relational schema, each tuple is divided into fields called
(a) Relations (b) Domains
(c) Queries (d) All of the above

180. In an ER model, ______ is described in the database by storing its data.
(a) Entity (b) Attribute
(c) Relationship (d) Notation

181. DFD stands for
(a) Data Flow Document
(b) Data File Diagram
(c) Data Flow Diagram
(d) None of the above

182. A top-to-bottom relationship among the items in a database is established by a
(a) Hierarchical schema
(b) Network schema
(c) Relational Schema
(d) All of the above

183. ______ table store information about database or about the system.
(a) SQL (b) Nested
(c) System (d) None of these

184. ______ defines the structure of a relation which consists of a fixed set of attribute-domain pairs.
(a) Instance (b) Schema
c) Program (d) Super Key

185. ______ clause is an additional filter that is applied to the result.
(a) Select (b) Group-by
(c) Having (d) Order by

186. A logical schema
(a) is the entire database
(b) is a standard way of organizing information into accessible parts.
(c) Describes how data is actually stored on disk.
(d) All of the above

187. ______ is a full form of SQL.
(a) Standard query language
(b) Sequential query language
(c) Structured query language
(d) Server side query language

188 A relational database developer refers to a record as
(a) a criteria (b) a relation
(c) a tuple d) an attribute

189. ______ keyword is used to find the number of values in a column.
(a) TOTAL (b) COUNT
(c) ADD (d) SUM

190. An advantage of the database management approach is
(a) data is dependent on programs
(b) data redundancy increases
(c) data is integrated and can be accessed by multiple programs
(d) none of the above

191 The collection of information stored in a database at a particular moment is called as ______
(a) schema
(b) instance of the database
(c) data domain
(d) independence

192. Data independence means
(a) data is defined separately and not included in programs.
(b) programs are not dependent on the physical attributes of data
(c) programs are not dependent on the logical attributes of data
(d) both B and C

193. A ______ is used to define overall design of the database
(a) schema
(b) application program
(c) data definition language
(d) code

194. Key to represent relationship between tables is called
(a) primary key
(b) secondary key
(c) foreign key
(d) none of the above

195. Grant and revoke are ______ statements
(a) DDL (b) TCL
(c) DCL (d) DML

196. DBMS helps achieve
(a) Data independence
(b) Centralized control of data
(c) Neither A nor B
(d) Both A and B

197. ______ command can be used to modify a column in a table
(a) alter (b) update
(c) set (d) create

198. The candidate key is that you choose to identify each row uniquely is called ______
(a) Alternate Key
(b) Primary Key
(c) Foreign Key
(d) None of the above

199. ______ is used to determine whether of a table contains duplicate rows.
(a) Unique predicate
(b) Like Predicate
(c) Null predicate
(d) In predicate

200. To eliminate duplicate rows ______ is used
(a) NODUPLICATE
(b) ELIMINATE
(c) DISTINCT
(d) None of these

201. DCL stands for
(a) Data Control Language
(b) Data Console Language
(c) Data Console Level
(d) Data Control Level

202. ______ is the process of organizing data into related tables.
(a) Normalization
(b) Generalization
(c) Specialization
(d) None of the above

203. A ______ Does not have a distinguishing attribute if its own and mostly are dependent entities, which are part of some another entity.
(a) Weak entity
(b) Strong entity
(c) Non attributes entity
(d) Dependent entity

204. ______ is the complex search criteria in the where clause.
(a) Sub string (b) Drop Table
(c) Predict (d) Predicate

205. ______ is preferred method for enforcing data integrity
(a) Constraints
(b) Stored Procedure
(c) Triggers
(d) Cursors

206. The number of tuples in a relation is called its ______ while the number of attributes in a relation is called its ______.
(a) Degree, Cardinality
(b) Cardinality, Degree
(c) Rows, Columns
(d) Columns, Rows

207. ______ database is used as template for all databases created.
(a) Master
(b) Model
(c) Tempdb
(d) None of the above

208. One aspect that has to be dealt with by the integrity subsystem is to ensure that only valid values can be assigned to each data items. This is referred to as
(a) Data Security
(b) Domain access
(c) Data Control
(d) Domain Integrity

209. ______ operator is basically a join followed by a project on the attributes of first relation.
(a) Join (b) Semi-Join
(c) Full Join (d) Inner Join

210. Which of the following is not a binary operator in relational algebra?
(a) Join (b) Semi-Join
(c) Assignment (d) Project

211. Centralizing the integrity checking directly under the DBMS ______. Duplication and ensures the consistency and validity of the database.
(a) Increases
(b) Skips
(c) Does not reduce
(d) Reduces

212. Which of the following is/are the DDL statements?
(a) Create
(b) Drop
(c) Alter
(d) All of the above

213. In snapshot, ______ clause tells oracle how long to wait between refreshes.
(a) Complete (b) Force
(c) Next (d) Refresh

214. ______ defines rules regarding the values allowed in columns and is the standard mechanism for enforcing database integrity.
(a) Column (b) Constraint
(c) Index (d) Trigger

215. For like predicate which of the following is true.
i) % matches zero of more characters.
ii) _ matches exactly one character.
(a) i-only (b) ii-only
(c) Both of them (d) None of them

216. In SQL, which command is used to issue multiple CREATE TABLE, CREATE VIEW and GRANT statements in a single transaction?
(a) CREATE PACKAGE
(b) CREATE SCHEMA
(c) CREATE CLUSTER
(d) All of the above

217. In SQL, the CREATE TABLESPACE is used
(a) to create a place in the database for storage of scheme objects, rollback segments, and naming the data files to comprise the table space.
(b) to create a database trigger.
(c) to add/rename data files, to change storage
(d) All of the above

218. Which character function can be used to return a specified portion of a character string?
(a) INSTR (b) SUBSTRING
(c) SUBSTR (d) POS

219. Which of the following is TRUE for the System Variable $date$?
(a) Can be assigned to a global variable.
(b) Can be assigned to any field only during design time.
(c) Can be assigned to any variable or field during run time.
(d) Can be assigned to a local variable.

220. What are the different events in Triggers?
(a) Define, Create
(b) Drop, Comment
(c) Insert, Update, Delete
(d) Select, Commit

221. Which is the subset of SQL commands used to manipulate Oracle Database Structures, including tables?
(a) Data Definition Language
(b) Data Manipulation Language
(c) Data Described Language
(d) Data Retrieval Language

222. The SQL statement SELECT SUBSTR ('123456789', INSTR ('abcabcabc','b'), 4) FROM EMP; prints
(a) 6789 (b) 2345
(c) 1234 (d) 456789

223. Which of the following SQL command can be used to modify existing data in a database table?
(a) MODIFY (b) UPDATE
(c) CHANGE (d) NEW

224. When SQL statements are embedded inside 3GL, we call such a program as ______
(a) nested query
(b) nested programming
(c) distinct query
(d) embedded SQL

225. ______ provides option for entering SQL queries as execution time, rather than at the development stage.
(a) PL/SQL (b) SQL*Plus
(c) SQL (d) Dynamic SQL

226. The language that requires a user to specify the data to be retrieved without specifying exactly how to get it is
(a) Procedural DML
(b) Non-Procedural DML
(c) Procedural DDL
(d) Non-Procedural DDL

227. Which two files are used during operation of the DBMS?
(a) Query languages and utilities
(b) DML and query language
(c) Data dictionary and transaction log
(d) Data dictionary and query language

228. The database schema is written in
(a) HLL (b) DML
(c) DDL (d) DCL

229. The way a particular application views the data from the database that the application uses is a
(a) module (b) relational model
(c) schema (d) sub schema

230. Which of the following are the properties of entities?
(a) Groups (b) Table
(c) Attributes (d) Switchboards

231. Which database level is closest to the users?
(a) External (b) Internal
(c) Physical (d) Conceptual

232. Which are the two ways in which entities can participate in a relationship?
(a) Passive and active
(b) Total and partial
(c) Simple and Complex
(d) All of the above

233. ______ data type can store unstructured data
(a) RAW (b) CHAR
(c) NUMERIC (d) VARCHAR

234. The RDBMS terminology for a row is
(a) tuple (b) relation
(c) attribute (d) degree

235. To change column value in a table the ______ command can be used.
(a) create (b) insert
(c) alter (d) update

236. The full form of DDL is
(a) Dynamic Data Language
(b) Detailed Data Language
(c) Data Definition Language
(d) Data Derivation Language

237. To pass on granted privileges to other user the ...... clause is used.
(a) create option (b) grant option
(c) update option (d) select option

238. A set of possible data values is called
(a) attribute (b) degree
(c) tuple (d) domain

239. ______ is critical in formulating database design.
(a) row column order
(b) number of tables
(c) functional dependency
(d) normalizing

240. A ______ represents the number of entities to which another entity can be associated
(a) mapping cardinality
(b) table
(c) schema
(d) information

241. Which two files are used during operation of the DBMS?
(a) Query languages and utilities
(b) DML and query language
(c) Data dictionary and transaction log
(d) Data dictionary and query language

242 A ______ is a set of column that identifies every row in a table.
(a) composite key (b) candidate key
(c) foreign key (d) super key

243. The relational model is based on the concept that data is organized and stored in two-dimensional tables called ______.
(a) Fields (b) Records
(c) Relations (d) Keys

244 ______ contains information that defines valid values that are stored in a column or data type.
(a) View (b) Rule
(c) Index (d) Default

245. Which of the syntax is correct for insert statement?
i) insert into <table_name> values <list of values>
ii) insert into <table_name> (column list) values <list of values>
(a) i-only (b) ii-only
(c) Both of them (d) None of them

246. ______ first proposed the process of normalization.
(a) Edgar. W
(b) Edgar F. Codd
(c) Edward Stephen
(d) Edward Codd

247. For using a specific database ______ command is used.
(a) use database
(b) database name use
(c) Both A &B
(d) None of them

248. Which of the following is not comparison operator?
(a) <> (b) <
(c) =< (d) >=

249. An outstanding functionality of SQL is its support for automatic ______ to the target data.
(a) programming (b) functioning
(c) navigation (d) notification

250. ______ is a special type of integrity constraint that relates two relations & maintains consistency across the relations.
(a) Entity Integrity Constraints
(b) Referential Integrity Constraints
(c) Domain Integrity Constraints
(d) Domain Constraints

251. ______ specifies a search condition for a group or an aggregate.
(a) GROUP BY Clause
(b) HAVING Clause
(c) FROM Clause
(d) WHERE Clause

252. Drop Table cannot be used to drop a table referenced by a ______ constraint.
(a) Local Key (b) Primary Key
(c) Composite Key (d) Foreign Key

253. ______ joins are SQL server default
(a) Outer
(b) Inner
(c) Equi
(d) None of the above

254. The ______ is essentially used to search for patterns in target string.
(a) Like Predicate (b) Null Predicate
(c) In Predicate (d) Out Predicate

255. Which of the following is/are the Database server functions?
i) Data management
ii) Transaction management
iii) Compile queries
iv) Query optimization
(a) i, ii, and iv only
(b) i, ii and iii only
(c) ii, iii and iv only
(d) All i, ii, iii, and iv

256. To delete a database ______ command is used
(a) delete database database_name
(b) Delete database_name
(c) drop database database_name
(d) drop database_name

257. ______ is a combination of two of more attributes used as a primary key
(a) Composite Key
(b) Alternate Key
(c) Candidate Key
(d) Foreign Key

258. Which of the following is not the function of client?
(a) Compile queries
(b) Query optimization
(c) Receive queries
(d) Result formatting and presentation

259. ______ is a special type of stored procedure that is automatically invoked whenever the data in the table is modified.
(a) Procedure
(b) Trigger
(c) Curser
(d) None of the above

260. ______ requires that data should be made available to only authorized users.
(a) Data integrity
(b) Privacy
(c) Security
(d) None of the above

261. Some of the utilities of DBMS are ______
i) Loading
ii) Backup
iii) File organization
iv) Process Organization
(a) i, ii, and iv only
(b) i, ii and iii only
(c) ii, iii and iv only
(d) All i, ii, iii, and iv

262. ______ allows individual row operation to be performed on a given result set or on the generated by a selected by a selected statement.
(a) Procedure (b) Trigger
(c) Curser (d) None of above

263. Processed data is called ______
(a) Raw data (b) Information
(c) Useful data (d) Source

264. ______ is a utility to capture a continuous record of server activity and provide auditing capability.
(a) SQL server Profile
(b) SQL server service manager
(c) SQL server setup
(d) SQL server wizard.

265. Data items grouped together for storage purposes are called a
(a) record (b) title
(c) list (d) string

266. ______ contains data assisting day to day activities of the organization.
(a) Control database
(b) Operational database
(c) Strategic database
(d) Sequential database

267. ______ approach reduces time and effort required for design and lesser risk in database management.
(a) Single global database
(b) Top-down approach
(c) Multiple databases
(d) None of the above

268. Which contain information about a file needed by system programs for accessing file records?
(a) File blocks (b) File operators
(c) File headers (d) None of these

269. A ______ DBMS distributes data processing tasks between the workstation and network server.
(a) Network (b) Relational
(c) Client Server (d) Hierarchical

270. The ______ is the one in which the primary key of one relation is used as a normal attribute in another relation.
(a) Referential relation
(b) Referencing relation
(c) Referenced relation
(d) Referred relation

271. A ______ integrity constraint requires that the values appearing in specified attributes of any tuple in the referencing relation also appear in specified attributes of at least one tuple in the referenced relation.
(a) Referential (b) Referencing
(c) Specific (d) Primary

272. DBMS is a collection of ______ that enables user to create and maintain a database.
(a) Keys
(b) Translators
(c) Program
(d) Language Activity

273. In an ER model, ______ is described in the database by storing its data.
(a) Entity (b) Attribute
(c) Relationship (d) Notation

274. DFD stands for
(a) Data Flow Document
(b) Data File Diagram
(c) Data Flow Diagram
(d) None of the above

275. A top-to-bottom relationship among the items in a database is established by a
(a) Hierarchical schema
(b)Network schema
(c) Relational Schema
(d) All of the above

276. ______ table store information about database or about the system.
(a) SQL (b) Nested
(c) System (d) None of these

277. ______ defines the structure of a relation which consists of a fixed set of attribute-domain pairs.
(a) Instance (b) Schema
(c) Program (d) Super Key

278. ______ clause is an additional filter that is applied to the result.
(a) Select (b) Group-by
(c) Having (d) Order by

279. A logical schema
(a) is the entire database
(b) is a standard way of organizing information into accessible parts.
(c) Describes how data is actually stored on disk.
(d) All of the above

280. ______ is a full form of SQL.
(a) Standard query language
(b) Sequential query language
(c) Structured query language
(d) Server side query language

281. Navigation pane is placed on
(a) The left of Access workspace
(b) The right of Access workspace
(c) Just below the Access workspace
(d) Just above the status bar

282. You can filter the display of different Access objects in navigation pane from
(a) View tab in ribbon
(b) Drop down menu at the top of navigation pane
(c) Sort & Filter group in Home menu
(d) Database tab

283. Software that defines a database, stores the data, supports a query language, produces reports and creates data entry screens is a:
(a) data dictionary
(b) database management system (DBMS)
(c) decision support system
(d) relational database

284. The separation of the data definition from the program is known as:
(a) data dictionary
(b) data independence
(c) data integrity
(d) referential integrity

285. HSAM stands for ______
(a) Hierarchic Sequential Access Method
(b) Hierarchic Standard Access Method
(c) Hierarchic Sequential and Method
(d) Hierarchic Standard and Method

286. SQL server stores index information in the ______ system table
(a) syst indexes (b) system indexes
(c) sysind (d) sys indexes

287. Which of the following is not a logical database structure?
(a) Chain (b) Network
(c) Tree (d) Relational

288. ______ is a preferred method for enforcing data integrity
(a) Constraints
(b) Stored procedure
(c) Triggers
(d) Cursors

289. Reflexivity property says that X - Y is true if Y is ______
(a) Subset of X (b) Null set of X
(c) Super set of Y (d) Subset of Y

290. Anything that affects the database schema is a part of
(a) DML (b) DCL
(c) DDL (d) All of the above

291. An instance of a relation is a time varying set of ______
(a) Tuples (b) Rows
(c) Both of them (d) None of them

292. In the ______ mode any record in the file can be accessed at random
(a) Sequential access
(b) Random access
(c) Standard access
(d) Source access

293. Which can be used to delete all the rows if a table?
(a) Delete * from table_name
(b) Delete from table_name
(c) Delete table_name
(d) all rows cannot be deleted at a time.

294. Which if the following is not the type of data integrity.
(a) Key integrity
(b) Domain integrity
(c) Entity integrity
(d) Referential integrity

295. 4NF stands for.
(a) Fourth Normal File
(b) Fourth Normal Form
(c) Fourth Normal Fraction
(d) Fourth Negative File

296. A ______ allows to make copies of the database periodically to help in the cases of crashes & disasters.
(a) Recovery utility
(b) Backup Utility
(c) Monitoring utility
(d) Data loading utility

297. ______ Allows definitions and query language statements to be entered; query results are formatted and displayed.
(a) Schema Processor
(b) Query Processor
(c) Terminal Interface
(d) None of the above

298. The main task carried out in the ______ is to remove repeating attributes to separate tables.
(a) First Normal Form
(b) Second Normal Form
(c) Third Normal Form
(d) Fourth Normal Form

299. ______ is the powerful language for working with RDBMS.
(a) Embedded Programs
(b) Dynamic Programs
(c) Query Language
(d) Static Language Programs

300. The file in DBMS is called as ______ in RDBMS.
(a) console (b) schema
(c) table (d) object

Answers

1.	2. b	3. b	4. d	5. c	6. a	7. b	8. b	9. d
10. c	11. b	12. b	13. c	14. a	15. a	16. c	17. a	18. a
19. a	20. b	21. a	22. c	23. b	24. c	25. a	26. c	27. a
28. c	29. d	30. d	31. a	32. a	33. c	34. a	35. b	36. a
37. b	38. c	39. b	40. d	41. d	42. b	43. d	44. c	45. b
46. b	47. d	48. a	49. b	50. d	51. a	52. b	53. d	54. b
55. c	56. a	57. c	58. c	59. c	60. c	61. d	62. c	63. d
64. c	65. c	66. c	67. c	68. b	69. c	70. d	71. c	72. d
73. b	74. b	75. d	76. d	77. a	78. c	79. c	80. d	81. c
82. b	83. d	84. b	85. d	86. d	87. b	88. b	89. d	90. b
91. a	92. d	93. a	94. d	95. c	96. d	97. b	98. b	99. a
100. b	101. d	102. d	103. d	104. c	105. a	106. c	107. d	108. a
109. d	110. a	111. b	112. b	113. c	114. b	115. a	116. d	117. d
118. d	119. a	120. c	121. a	122. d	123. a	124. b	125. c	126. d
127. a	128. b	129. b	130. a	131. d	132. b	133. d	134. a	135. b
136. d	137. c	138. d	139. a	140. d	141. a	142. c	143. a	144. c
145. a	146. b	147. c	148. d	149. d	150. c	151. a	152. a	153. d
154. c	155. d	156. b	157. a	158. d	159. c	160. a	161. b	162. c
163. b	164. d	165. d	166. d	167. b	168. c	169. b	170. a	171. b
172. c	173. b	174. d	175. a	176. b	177. d	178. c	179. b	180. a
181. c	182. a	183. c	184. b	185. c	186. b	187. c	188. c	189. b
190. c	191. b	192. d	193. a	194. c	195. c	196. d	197. a	198. b
199. a	200. c	201. a	202. a	203. a	204. d	205. a	206. b	207. b
208. d	209. b	210. d	211. d	212. d	213. d	214. b	215. c	216. b
217. a	218. c	219. b	220. c	221. a	222. b	223. b	224. d	225. d
226. b	227. c	228. c	229. d	230. c	231. a	232. b	233. a	234. a
235. d	236. c	237. b	238. d	239. c	240. a	241. c	242. d	243. c
244. c	245. c	246. b	247. a	248. c	249. c	250. b	251. b	252. d
253. b	254. a	255. a	256. c	257. a	258. b	259. b	260. c	261. b
262. c	263. b	264. b	265. a	266. b	267. c	268. c	269. c	270. c
271. a	272. c	273. a	274. c	275. a	276. c	277. b	278. c	279. b
280. c	281. a	282. b	283. b	284. b	285. a	286. d	287. a	288. a
289. a	290. c	291. c	292. b	293. a	294. a	295. b	296. b	297. c
298. d	299. c	300. c						

Software Engineering

1. A dynamic tool called Execution Verifier is also known as
(a) Test File Generator
(b) Coverage Analyzer
(c) Output Comparator
(d) Test Harness System

2. ______ software resides only in read only memory and is used to control products and systems for the consumer and industrial markets.
(a) Business (b) Embedded
(c) System (d) Personal

3. The ______ model stipulates that the requirements be completely specified before the rest of the development can processed.
(a) Waterfall
(b) Rapid Application Development (RAD)
(c) Iterative Development
(d) Incremental Development

4. ______ model couples the iterative nature of the prototyping with the controlled and systematic aspects of the linear sequential model.
(a) Spiral
(b) Rapid Application Development (RAD)
(c) Iterative Development
(d) Incremental Development

5. ______ is a function of the number of failures experienced by a particular user of that software.
(a) Software Usability
(b) Software reliability
(c) Software performance
(d) None of the above

6. Extracting data items and objects, to get information on data flow, and to understand the existing data structures that have been implemented is sometimes called
(a) Data analysis
(b) Directionality
(c) Data extraction
(d) Client applications

7. Transformation of a system from one representational form to another is known as
(a) Re-factoring
(b) Restructuring
(c) Forward engineering
(d) Both a and b

8. Which of the following is not an objective of reverse engineering?
(a) to reduce maintenance effort
(b) to cope with complexity
(c) to avoid side effects
(d) to assist migration to a CASE environment

9. Which of the following term describes testing?
(a) Finding broken code
(b) Evaluating deliverable to find errors
(c) A stage of all projects
(d) None of the mentioned

10. What is Cyclomatic complexity?
(a) Black box testing
(b) White box testing
(c) Yellow box testing
(d) Green box testing

11. Lower and upper limits are present in which hart?
(a) Run chart
(b) Bar chart
(c) Control chart
(d) None of the mentioned

12. Maintenance testing is performed using which methodology?
(a) Retesting
(b) Sanity testing
(c) Breadth test and depth test
(d) Confirmation testing

13. White Box techniques are also classified as
(a) Design based testing
(b) Structural testing
(c) Error guessing technique

14. Exhaustive testing is
(a) always possible
(b) practically possible
(c) impractical but possible
(d) impractical and impossible

15. Which of the following is/are White box technique?
(a) Statement Testing
(b) Decision Testing
(c) Condition Coverage
(d) All of these

16. What are the various Testing Levels?
(a) Unit Testing
(b) System Testing
(c) Integration Testing
(d) All of the mentioned

17. Which testing tool does a simple job of enforcing standards in a uniform way of many programs?
(a) Static Analyzer
(b) Code Inspector
(c) Standard Enforcer
(d) Both b & c

18. Software testing with real data in real environment is known as
(a) alpha testing
(b) beta testing
(c) regression testing
(d) None of the mentioned

19. Which of the following testing tools examine program systematically & automatically?
(a) Code Inspector
(b) Static Analyzer
(c) Standard Enforcer
(d) Coverage Analyzer

20. Statistical testing is a software testing process in which the objective is to measure the ______ of the software rather than to discover software faults.
(a) availability (b) reliability
(c) reusability (d) all of the above

21. Reliability in a software system can be achieved using which of the following strategies.
(a) Fault avoidance
(b) Fault tolerance
(c) Fault detection
(d) All the above

22. ______ strategy assumes that residual faults remain in the system and can continue in operation after some system failures have occurred.
(a) Fault avoidance
(b) Fault tolerance
(c) Fault detection
(d) None of the above

23. The SRS document is also known as ______ specification.
(a) black-box (b) white-box
(c) grey-box (d) All the above

24. ______ involves modifying the system so that the fault does not recur.
(a) Failure detection
(b) Damage assessment
(c) Fault recovery
(d) Fault repair

25. ______ is an approach to program development whereby programmers assume that there may be undetected faults or inconsistencies in their programs.
(a) Defensive programming
(b) Effective programming
(c) Strong programming
(d) Known programming

26. ______ is a classification scheme, which shows how an object class is related to other classes through common attributes and services.
(a) Hierarchy
(b) Inheritances
(c) Taxonomy
(d) None of the above

27. ______ is a list of names used by the systems, arranged alphabetically.
(a) Data Library
(b) Data Dictionary
(c) Name Dictionary
(d) System Dictionary

28. The ______ model of system design is a distributed system model which show how data and processing is distributed across a range of processors.
(a) repository
(b) client-server
(c) abstract machine
(d) None of the above

29. The main design activities in the software design process are
i) System specification
iii) Component design
ii) interface design
iv) algorithm design
(a) ii, iii and iv only
(b) i, ii and iii only
(c) i, iii and iv only
(d) All i, ii, iii and iv

30. ______ is the process, which controls the changes made to a system, and manages the different versions of the evolving software product.
(a) Software management
(b) Configuration management
(c) Version management
(d) Release management

31. The different types of software maintenance systems are
(a) Corrective maintenance
(b) Adaptive maintenance
(c) Perfective maintenance
(d) All the above

32. A ______ system in no more than idea.
(a) Conceptual (b) Logical
(c) Physical (d) None

33. Design Phase consists of ______.
1 Identity the functions to be performed
2 Design the input/output and file design
3 Defining basic parameters for system design
(a) 1 & 2 (b) 2 & 3
(c) 1 & 3 (d) 1, 2 & 3

34. A context diagram
(a) Describes the context of a system
(b) is a DFD which gives an overview of the system
(c) is a detailed description of a system
(d) is not used in drawing a detailed DFD

35. HIPO stand for
(a) Hierarchy input process output
(b) Hierarchy input plus output
(c) Hierarchy plus input process output
(d) Hierarchy input output Process

36. Statement of scope and objectives, opportunities and performance criteria ______.
(a) Problem definition
(b) System analysis
(c) System Design
(d) Documentation

37. System Development process is also called as ______.
(a) System Development Life Cycle
(b) System Life Cycle
(c) Both A and B
(d) System Process Cycle

38. The output of problem definition stage is ______.
(a) Master Development Plan
(b) Terms of reference
(c) Feasibility report
(d) Final product

39. Advantages of system flowcharts ______.
(a) Effective communication
(b) Effective analysis
(c) Queasier group or relationships
(d) All A, B, C

40. Based on the identification of objectives, input, output and file content, the vital document is called ______.
(a) System Definition
(b) System Document
(c) System Requirement Document
(d) System Subject

41. A context diagram is used
(a) as the first step in developing a detailed DFD of a system
(b) in systems analysis of very complex systems
(c) as an aid to system design
(d) as an aid to programmer

42. Which of the following is/are the sources for project requests?
(a) Request from Department managers
(b) Request from senior executives
(c) Request from system Analyst
(d) All of the above

43. DDS stands for ______.
(a) Data Systems
(b) Data Digital System
(c) Data Dictionary Systems
(d) Digital Data Service

44. ______ software makes use of non-numerical algorithms to solve complex problems that are not amenable to computation or straightforward analysis.
(a) Artificial Intelligence
(b) Web-based
(c) Embedded
(d) Real time

45. ______ is a sub discipline of computer Science that attempts to apply engineering principles to the creation, operation, modification and maintenance of the software components of various systems.
(a) Computer Engineering
(b) Hardware Engineering
(c) Software Engineering
(d) Component Engineering

46. The cost of software engineering includes approximately ______ of development costs and ______ of testing costs.
(a) 50%, 50% (b) 40%, 60%
(c) 80%, 20% (d) 60%, 40%

47. Software maintenance refers to the support phase of software development which includes.
(a) Correction (b) Adaption
(c) Enhancement (d) All the above

48. ______ Phase is a time consuming phase and yet a very crucial phase
(a) Feasibility Study
(b) Requirement Phase
(c) Analysis Phase
(d) Testing Phase

49. A DFD is normally leveled as
(a) It is a good idea in design
(b) It is recommended by many experts
(c) It is easy to do it
(d) It is easier to read and understand a number of smaller DFDs than one large DFD

50. ______ is responsible for all aspects of data processing, operation research, organization and method, system analysis and design investments.
(a) Management Services Director
(b) Data Processing Manager
(c) Computer Manager
(d) Both B and C

51. ______ is a tabular method for describing the logic of the decisions to be taken.
(a) Decision tables
(b) Decision tree
(c) Decision Method
(d) Decision Data

52. In ______ system the interaction between various subsystems cannot be defined with certainty
(a) Open System
(b) Closed System
(c) Deterministic System
(d) Probabilistic System

53. The key considerations involved in the feasibility analysis is include
i) Economical ii) Technical
iii) Behavioral iv) Personal
(a) i, ii, iv (b) i, ii, iii
(c) ii, iii, iv (d) All of the above

54 Choose the correct option in terms of Issues related to professional responsibility
(a) Confidentiality
(b) Intellectual property rights
(c) Both a & b
(d) Managing Client Relationships

55. "Software engineers should not use their technical skills to *misuse* other people's computers. "Here the term *misuse* refers to:
(a) Unauthorized access to computer material
(b) Unauthorized modification of computer material
(c) Dissemination of viruses or other malware
(d) All of the mentioned

56. Which of these is incorrect?
(a) Software engineering belongs to Computer science.
(b) Software engineering is a part of more general form of System Engineering.
(c) Computer science belongs to Software engineering.
(d) Software engineering is concerned with the practicalities of developing and delivering useful software.

57. Which of these is true?
(a) Generic products and customized products are types of software products.
(b) Generic products are produces by organization and sold to open market.
(c) Customized products are commissioned by particular customer.
(d) All of the above.

58. Which of these does not affect different types of software as a whole?
(a) Heterogeneity
(b) Flexibility
(c) Business and social change
(d) Security

59. The fundamental notions of software engineering does not account for?
(a) Software processes
(b) Software Security
(c) Software reuse
(d) Software Validation

60. Which of these is not true?
(a) Web has led to availability of software services and possibility of developing highly distributed service based systems.
(b) Web based systems have led to degradance of programming languages.
(c) Web brings concept of software as service.
(d) Web based system should be developed and delivered incrementally.

61. Build & Fix Model is suitable for programming exercises of ______ LOC (Line of Code).
(a) 100-200 (b) 200-400
(c) 400-1000 (d) above 1000

62. RAD stands for
(a) Relative Application Development
(b) Rapid Application Development
(c) Rapid Application Document

63. Which one of the following models is not suitable for accommodating any change?
(a) Build & Fix Model
(b) Prototyping Model
(c) RAD Model
(d) Waterfall Model

64. Which is not one of the types of prototype of Prototyping Model?
(a) Horizontal Prototype
(b) Vertical Prototype
(c) Diagonal Prototype
(d) Domain Prototype

65. Which one of the following is not a phase of Prototyping Model?
(a) Quick Design
(b) Coding
(c) Prototype Refinement
(d) Engineer Product

66. Which of the following statements regarding Build & Fix Model is wrong?
(a) No room for structured design
(b) Code soon becomes unfix-able & unchangeable
(c) Maintenance is practically not possible
(d) It scales up well to large projects

67. RAD Model has
(a) 2 phases (b) 3 phase
(c) 5 phases (d) 6 phases

68. What is the major drawback of using RAD Model?
(a) Highly specialized & skilled developers/designers are required.
(b) Increases re-usability of components.
(c) Encourages customer/client feedback.
(d) Both a & c.

69. SDLC stands for
(a) Software Development Life Cycle
(b) System Development Life cycle
(c) Software Design Life Cycle
(d) System Design Life Cycle

70. Which model can be selected if user is involved in all the phases of SDLC?
(a) Waterfall Model
(b) Prototyping Model
(c) RAD Model
(d) both b & c

71. Which one of the following is not an Evolutionary Process Model?
(a) WINWIN Spiral Model
(b) Incremental Model
(c) Concurrent Development Model
(d) All are Evolutionary Software Models

72 The Incremental Model is a result of combination of elements of which two models?
(a) Build & FIX Model & Waterfall Model
(b) Linear Model & RAD Model
(c) Linear Model & Prototyping Model
(d) Waterfall Model & RAD Model

73. What is the major advantage of using Incremental Model?
(a) Customer can respond to each increment
(b) Easier to test and debug
(c) It is used when there is a need to get a product to the market early
(d) Both b & c

74. The spiral model was originally proposed by
(a) IBM (b) Barry Boehm
(c) Pressman (d) Royce

75. The spiral model has two dimensions namely ______ and ______.
(a) diagonal, angular
(b) radial, perpendicular
(c) radial, angular
(d) diagonal, perpendicular

76. How is WINWIN Spiral Model different from Spiral Model?
(a) It defines tasks required to define resources, timelines, and other project related information.
(b) It defines a set of negotiation activities at the beginning of each pass around the spiral.
(c) It defines tasks required to assess both technical and management risks.
(d) It defines tasks required to construct, test, install, and provide user support.

77. Identify the disadvantage of Spiral Model.
(a) Doesn't work well for smaller projects
(b) High amount of risk analysis
(c) Strong approval and documentation control
(d) Additional Functionality can be added at a later date

78. How is Incremental Model different from Spiral Model?
(a) Progress can be measured for Incremental Model.
(b) Changing requirements can be accommodated in Incremental Model.
(c) Users can see the system early in Incremental Model.
(d) All the above

79. If you were to create client/server applications, which model would you go for?
(a) WINWIN Spiral Model
(b) Spiral Model
(c) Concurrent Model
(d) Incremental Model

80. *Selection of a model is based on*
(a) Requirements
(b) Development team
(c) Users
(d) All of the mentioned

81. *Which two models doesn't allow defining requirements early in the cycle?*
(a) Waterfall & RAD
(b) Prototyping & Spiral
(c) Prototyping & RAD
(d) Waterfall & Spiral

82. Explain what is meant by *PRODUCT* with reference to one of the eight principles as per the ACM/IEEE Code of Ethics?
(a) The product should be easy to use.
(b) Software engineers shall ensure that their products and related modifications meet the highest professional standards possible.
(c) Software engineers shall ensure that their products and related modifications satisfy the client.
(d) It means that the product designed /created should be easily available.

83. Identify the correct statement: "Software engineers shall
(a) Act in a manner that is in the best interests of his expertise and favor."
(b) Act consistently with the public interest."
(c) Ensure that their products only meet the SRS."
(d) None

84. Select the incorrect statement: "Software engineers should
(a) not knowingly accept work that is outside your competence."
(b) not use your technical skills to misuse other people's computers."
(c) be dependent on their colleagues."
(d) maintain integrity and independence in their professional judgment."

85. Efficiency in a software product does not include ________
(a) responsiveness
(b) licensing
(c) memory utilization
(d) processing time

86. As per an IBM report, "31%of the project get cancelled before they are completed, 53% overrun their cost estimates by an average of 189% and for every 100 projects, there are 94 restarts". What is the reason for these statistics?
(a) Lack of adequate training in software engineering
(b) Lack of software ethics and understanding
(c) Management issues in the company
(d) All the above

87. The reason for software bugs and failures is due to
(a) Software companies
(b) Software Developers
(c) Both a and b
(d) All the above

88. Agile Software Development is based on
(a) Incremental Development
(b) Iterative Development
(c) Linear Development
(d) Both a and b

89. Which one of the following is not an agile method?
(a) XP (b) 4GT
(c) AUP (d) All the above

90. How is plan driven development different from agile development?
(a) Outputs are decided through a process of negotiation during the software development process.
(b) Specification, design, implementation and testing are interleaved
(c) Iteration occurs within activities
(d) All the above

91. How many phases are there in Scrum?
(A) Two
(b) Three
(C) Four
(d) Scrum is an agile method which means it does not have phases.

92. Which of the following does not apply to agility to a software process?
(a) Uses incremental product delivery strategy
(b) Only essential work products are produced
(c) Eliminate the use of project planning and testing
(d) All the above

93. Which three framework activities are present in Adaptive Software Development (AS(d)?
(a) analysis, design, coding
(b) requirements gathering, adaptive cycle planning, iterative development
(c) speculation, collaboration, learning
(d) All the above

94. What are the types of requirements?
(a) Availability
(b) Reliability
(c) Usability
(d) All of the mentioned

95. Select the developer specific requirement?
(a) Potability (b) Maintainability
(c) Availability (d) Both a and b

96. Which one of the following is ,not a step of requirement engineering?
(a) elicitation (b) design
(c) analysis (d) documentation

97. FAST stands for
(a) Functional Application Specification Technique
(b) Fast Application Specification Technique
(c) Facilitated Application Specification Technique
(d) None of the mentioned

98. QFD stands for
(a) quality function design
(b) quality function development
(c) quality function deployment
(d) none of the mentioned

99. The user system requirements are the parts of which document?
(a) SDD (b) SRS
(c) DDD

100. Which is one of the most important stakeholder from the following?
(a) Entry level personnel
(b) Middle level stakeholder(c) Managers
(d) Users of the software

101. Which one of the following is a functional requirement?
(a) Maintainability
(b) Portability
(c) Robustness
(d) None of the mentioned

102. Which one of the following is a requirement that fits in a developer's module?
(a) Availability (b) Testability
(c) Usability (d) Flexibility

103. Which of these are not among the eight principles followed by Software Engineering Code of Ethics and Professional Practice?
(a) PUBLIC (b) PROFESSION
(c) PRODUCT (d) ENVIRONMENT

104 What is a Software?
(a) Software is set of programs.
(b) Software is documentation and configuration of data.
(c) Both a and b
(d) None of the mentioned

105. Which of these does not account for software failure?
(a) Increasing Demand
(b) Low expectation
(c) Increasing Supply
(d) Less reliable and expensive.

106. What are attributes of good software?
(a) Software maintainability.
(b) Software functionality.
(c) Software development.
(d) a and b.

107. Which of these software engineering activities are not a part of software processes?
(a) Software dependence.
(b) Software development.
(c) Software validation.
(d) Software specification.

108. Which of the following life cycle model can be chosen if the development team has less experience on similar projects?
(a) Spiral
(b) Waterfall
(c) RAD
(d) Iterative Enhancement Model

109. If you were a lead developer of a software company and you are asked to submit a project/product within a stipulated time-frame with no cost barriers, which model would you select?
(a) Waterfall (b) Spiral
(c) RAD (d) Incremental

110. Which two of the following models will not be able to give the desired outcome if user's participation is not involved?
(a) Waterfall & Spiral
(b) RAD & Spiral
(c) RAD & Waterfall
(d) RAD & Prototyping

111. A company is developing an advance version of their current software available in the market, what model approach would they prefer?
(a) RAD
(b) Iterative Enhancement
(c) Both a & b
(d) Spiral

112. Choose the correct option from given below:
(a) Prototyping Model facilitates re-usability of components
(b) RAD Model facilitates re-usability of components
(c) Both RAD & Prototyping Model facilitates re-usability of components
(d) none

113. Which one of the following is not a software process quality?
(a) Productivity (b) Portability
(c) Timeliness (d) Visibility

114. _______&_______ are two kinds of software products.
(a) CAD, CAM
(b) Firmware, Embedded
(c) Generic, Customized
(d) All the above

115. Which one of the following is not an application of embedded software product?
(a) key pad control of a security system
(b) pattern recognition game playing
(c) digital function of dashboard display in a car
(d) All of the above

116. Purpose of process is to deliver software
(a) in time
(b) with acceptable quality
(c) that is cost efficient
(d) both a & b

117. Which of the following activities of a Generic Process framework provides a feedback report?
(a) Communication
(b) Planning
(c) Modeling & Construction
(d) Deployment

118. Which one of the following is not an Umbrella Activity that complements the five process framework activities and help team manage and control progress, quality, change, and risk.
(a) Re-usability management
(b) Risk management
(c) Measurement
(d) User Reviews

119. Four types of change are encountered during the support phase. Which one of the following is not one that falls into such category?
(a) Translation (b) Correction
(c) Adaptation (d) Prevention

120. Choose an internal software quality from given below:
(a) scalability (b) usability
(c) reusability (d) reliability

121. RUP stands for______ created by a division of _______.
(a) Rational Unified Program, IBM
(b) Rational Unified Process, Infosys
(c) Rational Unified Process, Microsoft
(d) Rational Unified Process, IBM

122. 9The RUP is normally described from three perspectives-dynamic, static & practice. What does static perspective do?
(a) It shows the process activities that are enacted.
(b) It suggests good practices to be used during the process.
(c) It shows the phases of the model over time.
(d) All of the above

123. Which phase of the RUP is used to establish a business case for the system?
(a) Transition (b) Elaboration
(c) Construction (d) Inception

124. Which one of the following is not a fundamental activity for software processes in software engineering?
(a) Software Verification
(b) Software Validation
(c) Software design and implementation
(d) Software evolution

125. The longer a fault exists in software
(a) the more tedious its removal becomes
(b) the more costly it is to detect and correct
(c) the less likely it is to be properly corrected
(d) All of the mentioned

126. *Select the option that suits the Manifesto for Agile Software Development*
(a) Individuals and interactions
(b) Working software
(c) Customer collaboration
(d) All of the mentioned

127. "Consider a system where, a heat sensor detects an intrusion and alerts the security company." What kind of a requirement the system is providing?
(a) Functional
(b) Non-Functional
(c) Known Requirement
(d) All of the above

128. Which of the following statements explains portability in non-functional requirements?
(a) It is a degree to which software running on one platform can easily be converted to run on another platform.
(b) It can be enhanced by using languages, OS' and tools that are universally available and standardized.
(c) The ability of the system to behave consistently in a user-acceptable manner when operating within the environment for which the system was intended.
(d) Both a and b

129. How many classification schemes have been developed for NFRs?
(a) Two (b) Three
(c) Four (d) Five

130. According to components of FURPS+, which of the following does not belong to S?
(a) Testability
(b) Speed Efficiency
(c) Serviceability
(d) Installability

131. What are the four dimensions of Dependability?
(a) Usability, Reliability, Security, Flexibility
(b) Availability, Reliability, Maintainability, Security
(c) Availability, Reliability, Security, Safety
(d) Security, Safety, Testability, Usability

132. Which of the following is not a diagram studied in Requirement Analysis?
(a) Use Cases
(b) Entity Relationship Diagram
(c) State Transition Diagram
(d) Activity Diagram

133. How many feasibility studies is conducted in Requirement Analysis?
(a) Two (b) Three
(c) Four (d) Five

134. How many phases are there in Requirement Analysis?
(a) Three (b) Four
(c) Five (d) Six

135. ______ and ______ are the two issues of Requirement Analysis.
(a) Performance, Design
(b) Stakeholder, Developer
(c) Functional, Non-Functional
(d) All of the above

136. The requirements that result from requirements analysis are typically expressed from one of three perspectives or views. What is that perspective or view?
(a) Developer (b) User
(c) Non-Functional (d) Physical

137. Coad and Yourdon suggested ______ selection characteristics that should be used as an analyst considers each potential object for inclusion in the requirement analysis model.
(a) Three (b) Four
(c) Five (d) Six

138. Which of the following property does not correspond to a good Software Requirements Specification (SRS)?
(a) Verifiable (b) Ambiguous
(c) Complete (d) Traceable

139. Which of the following property of SRS is depicted by the statement: "Conformity to a standard is maintained"?
(a) Correct (b) Complete
(c) Consistent (d) Modifiable

140. The documentation of a process which records the tasks, the roles and the entities used is called
(a) Process metric
(b) Process analysis
(c) Process modelling
(d) None of the mentioned

141. What is often undefined and is left to the ingenuity of the project managers and engineers?
(a) Role (b) Exception
(c) Activity (d) Process

142. Which of the following is not a part of process change?
(a) Introducing new practices, methods or processes
(b) Introducing new team members to existing project
(c) Introducing or removing deliverable
(d) Introducing new roles or responsibilities

143. The CMMI assessment is based on a x-point scale. What is the value of x?
(a) 0 (b) 2
(c) 4 (d) 6

144. Which of the following is not included in failure costs?
(a) rework
(b) repair
(c) failure mode analysis
(d) none of the mentioned

145. Which requirements are the foundation from which quality is measured?
(a) Hardware
(b) Software
(c) Programmers
(d) None of the mentioned

146. Which of the following is not a SQA plan for a project?
(a) evaluations to be performed
(b) amount of technical work
(c) audits and reviews to be performed
(d) documents to be produced by the SQA group

147. Degree to which design specifications are followed in manufacturing the product is called
(a) Quality Control
(b) Quality of conformance
(c) Quality Assurance
(d) None of the mentioned

148. Which of the following is not included in External failure costs?
(a) testing
(b) help line support
(c) warranty work
(d) complaint resolution

149. Which of the following is not an appraisal cost in SQA?
(a) inter-process inspection
(b) maintenance
(c) quality planning
(d) testing

150. Who identifies, documents, and verifies that corrections have been made to the software?
(a) Project manager
(b) Project team
(c) SQA group
(d) All of the mentioned

151. The primary objective of formal technical reviews is to find _______ during the process so that they do not become defects after release of the software.
(a) errors
(b) equivalent faults
(c) failure cause
(d) None of the mentioned

152. What is not included in prevention costs?
(a) quality planning
(b) formal technical reviews
(c) test equipment
(d) equipment calibration and maintenance

153. Which of the following categories is part of the output of software process?
(a) computer programs
(b) documents that describe the computer programs
(c) data
(d) All of the mentioned

154. Which is a software configuration management concept that helps us to control change without seriously impeding justifiable change?
(a) Baselines
(b) Source code
(c) Data model
(d) None of the mentioned

155. Software Configuration Management can be administered in several ways. These include
(a) A single software configuration management team for the whole organization
(b) A separate configuration management team for each project
(c) Software Configuration Management distributed among the project members
(d) All of the mentioned

156. What combines procedures and tools to manage different versions of configuration objects that are created during the software process?
(a) Change control
(b) Version control
(c) SCIs
(d) None of the mentioned

157. What complements the formal technical review by assessing a configuration object for characteristics that are generally not considered during review?
(a) Software configuration audit
(b) Software configuration management
(c) Baseline
(d) None of the mentioned

158. Which of the following is the process of assembling program components, data, and libraries, and then compiling and linking these to create an executable system?
(a) System building
(b) Release management
(c) Change management
(d) Version management

159. Which of the following option is not tracked by configuration management tools?
(a) Tracking of change proposals
(b) Storing versions of system components
(c) Tracking the releases of system versions to customers
(d) None of the mentioned

160. Which of the following is not a Software Configuration Management Activity?
(a) Configuration item identification
(b) Risk management
(c) Release management
(d) Branch management

161. The definition and use of configuration management standards is essential for quality certification in
(a) ISO 9000
(b) CMM
(c) CMMI
(d) All of the mentioned

162. What involves preparing software for external release and keeping track of the system versions that have been released for customer use?
(a) System building
(b) Release management
(c) Change management
(d) Version management

163. Which of the following process ensures that versions of systems and components are recorded and maintained?
(a) Codeline
(b) Configuration control
(c) Version
(d) Workspace

164. Which of the following process is concerned with analyzing the costs and benefits of proposed changes?
(a) Change management
(b) Version management
(c) System building
(d) Release management

165. Which of the following is not a Version management feature?
(a) Version and release identification
(b) Build script generation
(c) Project support
(d) Change history recording

166. Which method recommends that very frequent system builds should be carried out with automated testing to discover software problems?
(a) Agile method
(b) Parallel compilation method
(c) Large systems method
(d) All of the mentioned

167. Which of the following is not a build system feature?
(a) Minimal recompilation
(b) Documentation generation
(c) Storage management
(d) Reporting

168. Which of the following is a collection of component versions that make up a system?
(a) Version
(b) Codeline
(c) Baseline
(d) None of the above

169. Which of the following is a configuration item?
(a) Design specification
(b) Source code
(c) Test specification
(d) All of the mentioned

170. Which of the following is a part of system release?
(a) electronic and paper documentation describing the system
(b) packaging and associated publicity that have been designed for that release
(c) an installation program that is used to help install the system on target hardware
(d) all of the mentioned documentation that includes all of the components of the system release.

171. A sequence of baselines representing different versions of a system is known as
(a) System building
(b) Mainline
(c) Software Configuration Item (SCI)
(d) None of the above

172. Which of the following term is best defined by the statement "The creation of a new codeline from a version in an existing codeline"?
(a) Branching (b) Merging
(c) Codeline (d) Mainline

173. What do you understand by V&V in software testing?
(a) Verified Version
(b) Version Validation
(c) Verification and Validation
(d) Version Verification

174. Which granularity level of testing checks the behavior of module cooperation?
(a) Unit Testing
(b) Integration Testing
(c) Acceptance Testing
(d) Regression Testing

175. Which test refers to the retesting of a unit, integration and system after modification, in order to ascertain that the change has not introduced new faults?
(a) Regression Test
(b) Smoke Test
(c) Alpha Test
(d) Beta Test

176. Which of the following is a black box testing strategy?
(a) All Statements Coverage
(b) Control Structure Coverage
(c) Cause-Effect Graphs
(d) All Paths Coverage

177. A set of inputs, execution preconditions and expected outcomes is known as a
(a) Test plan (b) Test case
(c) Test document(d) Test Suite

178. In which test design each input is tested at both ends of its valid range and just outside its valid range?
(a) Boundary value testing
(b) Equivalence class partitioning
(c) Boundary value testing AND Equivalence lass partitioning
(d) Decision tables

179. When does the testing process stops?
(a) When resources (time and budget) are over
(b) When some coverage is reached
(c) When quality criterion is reached
(d) Testing never ends.

180. Which of the following is not a part of a test design document?
(a) Test Plan
(b) Test Design Specification
(c) Test Case Specification
(d) Test Log

181. Specifying a set of test cases or test paths for each item to be tested at that level is known as
(a) Test case generation
(b) Test case design
(c) ALL of the mentioned
(d) None of the mentioned

182. PRD stands for
(a) Product Requirement Document
(b) Project Requirement Document
(c) Product Restrictions Document
(d) None of the mentioned

183. Which mechanism is applied to use a design pattern in an OO system?
(a) Inheritance
(b) Composition
(c) All of the mentioned
(d) None of the mentioned

184. The use of design patterns for the development of object-oriented software has important implications for
(a) component-based software engineering
(b) Reusability in general
(c) All of the mentioned
(d) None of the mentioned

185. Which of the following is a design pattern?
(a) Behavioral
(b) Structural
(c) Abstract Factory
(d) All of the mentioned

186. You want to minimize development cost by reusing methods? Which design pattern would you choose?
(a) Adapter Pattern
(b) Singleton Pattern
(c) Delegation pattern
(d) Immutable Pattern

187. The recurring aspects of designs are called design
(a) patterns (b) documents
(c) structures (d) methods

188. Which pattern prevents one from creating more than one instance of a variable?
(a) Factory Method
(b) Singleton
(c) Observer
(d) None of the mentioned

189. Which design pattern defines one-to-many dependency among objects?
(a) Singleton pattern
(b) Facade Pattern
(c) Observer pattern
(d) Factory method pattern

190. The open source movement has meant that there is a huge reusable code base available at
(a) free of cost
(b) low cost
(c) high cost
(d) short period of time

191. Consider the example and categorize it accordingly, "A pattern-matching system developed as part of a text-processing system may be reused in a database management system".
(a) Application system reuse
(b) Component reuse
(c) Object and function reuse
(d) None of the mentioned

192. COTS stands for
(a) Commercial Off-The-Shelf systems
(b) Commercial Off-The-Shelf states
(c) Commercial Off-The-System state
(d) None of the mentioned

193. NET are specific to which platform?
(a) Java (b) Mac-OS
(c) Microsoft (d) LINUX

194. Which of the following is a generic structure that is extended to create a more specific subsystem or application?
(a) Software reuse
(b) Object-oriented programming language
(c) Framework
(d) None of the mentioned

195. "An ordering system may be adapted to cope with a centralized ordering process in one company and a distributed process in another." Which category the example belong to?
(a) Process specialization
(b) Platform specialization
(c) Environment specialization
(d) Functional specialization

196. What are generic application systems that may be designed to support a particular business type, activity, or sometimes a complete enterprise?
(a) COTS-solution systems
(b) COTS-integrated systems
(c) ERP systems
(d) Both COTS-solution and COTS-integrated systems

197. Which of the following is not an advantages of software reuse?
(a) lower costs
(b) faster software development
(c) high effectiveness
(d) lower risks

198. ERP stands for
(a) Effective Reuse Planning
(b) Enterprise Resource Planning
(c) Effective Research Planning
(d) None of the mentioned

199. Which of the following option is not provided by formal methods?
(a) providing frameworks
(b) verifying systems
(c) provide investors
(d) both providing frameworks and verifying systems

200. ______ are statements that can be interpreted in a number of ways.
(a) Contradictions
(b) Ambiguities
(c) Vagueness
(d) Comments

201. What defines the circumstances in which a particular operation is valid?
(a) Contradictions
(b) Post-condition
(c) Vagueness
(d) None of the mentioned

202. Which of the following is a way of making a statement about the elements of a set that is true for every member of the set?
(a) Set
(b) Sequence
(c) Universal quantification
(d) both Set and Sequence

203. Which of the following occurs often due to the bulkiness of a system specification document?
(a) Contradictions
(b) Ambiguities
(c) Vagueness
(d) Incompleteness

204. The ______ of a formal specification language is often based on a syntax that is derived from standard set theory notation and predicate calculus.
(a) semantic domain
(b) syntactic domain
(c) sequence
(d) set

205. Which of the following provides a concise, unambiguous, and consistent method for documenting system requirements?
(a) CMM
(b) ISO-9001
(c) CASE tools
(d) Formal methods

206. The ______ of a specification language indicates how the language represents system requirements.
(a) semantic domain
(b) syntactic domain
(c) sequence
(d) set

207. Which of the following is essential for success, when formal methods are used for the first time?
(a) Expert training
(b) Consulting
(c) Pre-requisite knowledge
(d) Both Expert training and Consulting

208. Which of the following is a feature of CBSE?
(a) It increases quality
(b) CBSE shortens delivery time
(c) CBSE increases productivity
(d) All of the mentioned

209. Which of the following term is best define by the statement: "For a component to be composable, all external interactions must
take place through publicly defined interfaces"?
(a) Standardized (b) Independent
(c) Composable (d) Documented

210. A component model defines standards for
(a) properties
(b) methods
(c) mechanisms
(d) All of the mentioned

211. Which of the following is not an example of component technology?
(a) EJB
(b) COM+
(c) .NET
(d) None of the mentioned

212. Which of the following term is best defined by the statement: "The operations on each side of the interface have the same name but their parameter types or the number of parameters are different."?
(a) Parameter incompatibility
(b) Operation incompleteness
(c) Operation incompatibility
(d) None of the mentioned

213. Which of the following term is best defined by the statement: "The names of the operations in the 'provides' and 'requires' interfaces are different."?
(a) Parameter incompatibility
(b) Operation incompleteness
(c) Operation incompatibility
(d) None of the above

214. A ______ defines a set of standards for components, including interface standards, usage standards, and deployment standards.
(a) Component-based software engineering
(b) Component composition
(c) Component model
(d) Component interfaces

215. When composing reusable components that have not been written for your application, you may need to write adaptors or 'glue code' to reconcile the different ______.
(a) Component modules
(b) Component composition
(c) Component model
(d) Component interfaces

216. ______ is a reuse-based approach to defining, implementing, and composing loosely coupled independent components into systems.
(a) Component-based software engineering
(b) Component composition
(c) Component model
(d) Component interfaces

217. Which of the following term is best defined by the statement "In a distributed system, several processes may operate at the same time on separate computers on the network."?
(a) Concurrency
(b) Openness
(c) Resource sharing
(d) Fault tolerance

218. Which of the following is not a dimension of scalability?
(a) Size (b) Distribution
(c) Manageability (d) Interception

219. A distributed system must defend itself against
(a) Modification
(b) Interruption
(c) Fabrication
(d) All of the mentioned

220. QoS stands for
(a) Quality of security
(b) Quality of system
(c) Quality of service
(d) None of the mentioned

221. In Java, ______ are comparable with, though not identical to, RPCs.
(a) Remote Method Invocations
(b) Operating System
(c) Client–server computing
(d) None of the above

222. ______ depend on there being a clear separation between the presentation of information and the computations that create and process that information.
(a) Master-slave architectures
(b) Client–server systems
(c) Two-tier client–server architecture
(d) Both Master-slave architectures AND Client–server systems

223. Which architecture is used when there is a high volume of transactions to be processed by the server?
(a) Multi-tier client–server architecture
(b) Master-slave architecture
(c) Distributed component architecture
(d) Peer-to-peer architecture

224. Which architecture are reliant on middle-ware?
(a) Multi-tier client–server architecture
(b) Master-slave architecture
(c) Distributed component architecture
(d) Peer-to-peer architecture

225. ______ is a way of providing functionality on a remote server with client access through a web browser.
(a) SaaS
(b) SOA
(c) Configurability
(d) both SaaS and Configurability

226. Which architecture decentralized architectures in which there are no distinguished clients and servers?
(a) Multi-tier client–server architecture
(b) Master-slave architecture
(c) Distributed component architecture
(d) Peer-to-peer architecture

227. Which of the following is a category of a stimuli?
(a) Periodic stimuli
(b) Software stimuli
(c) Hardware stimuli
(d) Management stimuli

228. Which of the following activities may be included in a real-time software design process?
(a) Platform selection
(b) Timing analysis
(c) Process design
(d) All of the mentioned

229. Which of the following is not a real-time architectural pattern
(a) Observe and React
(b) Environmental Control
(c) Embedded System
(d) Process Pipeline

230. RTOS stands for
(a) real-life operating system
(b) real-time operating system
(c) real-time operating software
(d) real-life operating software

231. The times by which stimuli must be processed and some response produced by the system is known as
(a) Compile time (b) Frequency
(c) Deadlines (d) Execution time

232. The switch to backup power must be completed within a deadline of
(a) 50 ms (b) 55 ms
(c) 70 ms (d) 100 ms

233. An example of a system that may use a process pipeline is a ______.
(a) High-speed data acquisition system
(b) Failure of a power supply in an embedded system
(c) Both High-speed data acquisition system AND Failure of a power supply in an embedded system
(d) None of the mentioned

234. The average execution time of the power monitor process should be less than
(a) 1ms
(b) 10ms
(c) 100ms
(d) none of the above

235. The ______ is connected to servers (typically powerful workstations or PCs) that play a dual role.
(a) database
(b) software
(c) Hardware
(d) None of the mentioned

236. Which of the following term is best defined by the statement: "The client sends structured query language (SQL) requests to the server which are transmitted as messages across the net"?
(a) File servers
b) Database servers
(c) Client servers
(d) None of the mentioned

237. Which subsystem implements the requirements defined by the application?
(a) UI
(b) DBMS
(c) Application subsystem
(d) None of the mentioned

238. Which test do you infer from the following statement: "The coordination and data management functions of the server are tested."?
(a) Server tests
(b) Application function tests
(c) Transaction tests
(d) Network communication tests

239. Which of the following presentation is explained in the following statement: "An extension of the distributed presentation approach, primary database and application logic remain on the server, and data sent by the server is used by the client to prepare the user presentation."?
(a) Local Presentation
(b) Distributed presentation
(c) Remote presentation
(d) All of the above

240. "A client is assigned all user presentation tasks and the processes associated with data entry". Which option supports the client's situation?
(a) Distributed logic
(b) Distributed presentation
(c) Remote presentation
(d) All of the above

241. What is used to pass SQL requests and associated data from one component to another?
(a) Client/server SQL interaction
(b) Remote procedure calls
(c) SQL Injection
(d) All of the above

242. When a client application invokes a method contained within an object elsewhere in the system, CORBA uses dynamic invocation to
(a) obtain pertinent information about the desired method from the interface repository
(b) create a data structure with parameters to be passed to the object
(c) create a request for the object
(d) All of the mentioned

243. Which of the following services is not provided by an object?
(a) Activating & Deactivating Objects
(b) Security features
(c) Files implementing the entities identified within the ERD
(d) Registering object implementation

244. Which of the following term is best defined by the statement: "When one object invokes another independent object, a message is passed between the two objects."?
(a) Control couple
(b) Application object
(c) Data couple
(d) Database object

245. CORBA stands for
(a) Common Object Request Build Architecture
(b) Common Object Request Broker Architecture
(c) Common Object Request Break Architecture
(d) All of the above

246. Which web app attribute is defined by the statement: "A large number of users may access the WebApp at one time"?
(a) Unpredictable load
(b) Performance
(c) Concurrency
(d) Network intensiveness

247. Which web app attribute is defined by the statement: "The quality and aesthetic nature of content remains an important determinant of the quality of a WebApp"?
(a) Availability
(b) Data driven
(c) Content sensitive
(d) Continuous evolution

248. If the user queries a collection of large databases and extracts information from the webapp, the webapp is categorized under
(a) Service oriented app
(b) Database access app
(c) Portal app
(d) Data warehousing app

249. Which process model should be used in virtually all situations of web engineering?
(a) Incremental Model
(b) Waterfall Model
(c) Spiral Model
(d) None of the mentioned

250. Which analysis is a part of Analysis model of the web engineering process framework?
(a) Content Analysis
(b) Interaction Analysis
(c) Functional Analysis
(d) All of the mentioned

251. Which of the following statements are incorrect with reference to web-based systems? Web-based systems
(a) should be unscalable
(b) must be able to cope with uncertain, random heavy demands on services
(c) must be secure
(d) are subject to assorted legal, social, and ethical scrutiny

252. What category of web-based system would you assign to electronic shopping?
(a) Informational
(b) Interactive
(c) Transaction-oriented
(d) Workflow-oriented

253. What category of web-based system would you assign to discussion groups?
(a) Collaborative work
(b) Online communities
(c) Web portals
(d) Workflow-oriented

254. W3C stands for
(a) World Wide Web Consortium
(b) World Wide Web Collaboration
(c) World Wide Web Community
(d) None of the mentioned

255. Which of the following is a risk associated with using hypertext in web applications?
(a) loss of sense of locality and direction
(b) cognitive overload for users
(c) All of the mentioned
(d) None of the mentioned

256. What are the problems with re-structuring?
(a) Loss of comments
(b) Loss of documentation
(c) Heavy computational demands
(d) All of the mentioned

257. Which of the following is not a module type?
(a) Object modules
(b) Hardware modules
(c) Functional modules
(d) Process support modules

258. Reverse engineering of data focuses on
(a) Internal data structures
(b) Database structures
(c) ALL of the mentioned
(d) None of the mentioned

259. Which of the following is not an example of a business process?
(a) designing a new product
(b) hiring an employee
(c) purchasing services
(d) testing software

260. Which of the following is a data problem?
(a) hardware problem
(b) record organization problems
(c) heavy computational demands
(d) loss of comments

261. When does one decides to re-engineer a product?
(a) when tools to support restructuring are disabled
(b) when system crashes frequently
(c) when hardware or software support becomes obsolete
(d) subsystems of a larger system require few maintenances

262. Which of the following is not a business goal of re-engineering?
(a) Cost reduction
(b) Time reduction
(c) Maintainability
(d) None of the mentioned

263 Which of these benefits can be achieved when software is restructured?
(a) Higher quality programs
(b) Reduced maintenance effort
(c) Software easier to test
(d) All of the mentioned

264. BPR stands for
(a) Business process re-engineering
(b) Business product re-engineering
(c) Business process requirements
(d) All of the above

265. Source code translation is a part of which re-engineering technique?
(a) Data re-engineering
(b) Re-factoring
(c) Restructuring
(d) None of the mentioned

266. In reverse engineering process, what refers to the sophistication of the design information that can be extracted from the source code?
(a) interactivity
(b) completeness
(c) abstraction level
(d) direction level

267. In reverse engineering, what refers to the level of detail that is provided at an abstraction level?
(a) interactivity
(b) completeness
(c) abstraction level
(d) directionality

268. The core of reverse engineering is an activity called
(a) restructure code
(b) directionality
(c) extract abstractions
(d) interactivity

269. What have become de rigueur for computer-based products and systems of every type?
(a) GUIs
(b) candidate keys
(c) object model
(d) All of the mentioned

270. Forward engineering is also known as
(a) extract abstractions
(b) renovation
(c) reclamation
(d) both renovation and reclamation

271. Reverse engineering is the process of deriving the system design and specification from its
(a) GUI
(b) Database
(c) Source code
(d) All of the mentioned

272. Which of the following steps may not be used to define the existing data model as a precursor to re-engineering a new database model:
(a) Build an initial object model
(b) Determine candidate keys
(c) Refine the tentative classes
(d) Discover user interfaces

273. Much of the information necessary to create a behavioral model can be obtained by observing the external manifestation of the existing
(a) candidate keys
(b) interface
(c) database structure
(d) none of the above

274. Which testing tool is responsible for documenting programs?
(a) Test/File Generator
(b) Test Harness System
(c) Test Archiving Systems
(d) Coverage Analyzer

275. Beta Testing is done by
(a) Developers
(b) Testers
(c) Users
(d) All of the mentioned

276. Debugging Program is a program which runs concurrently with the program under test & provide commands to
(a) examine memory & registers
(b) stop execution at a particular point
(c) search for references for particular variables, constant and registers
(d) All of the mentioned

277. The SRS is said to be *consistent* if and only if
(a) its structure and style are such that any changes to the requirements can be made easily while retaining the style and structure.
(b) every requirement stated therein is one that the software shall meet
(c) every requirement stated therein is verifiable
(d) no subset of individual requirements described in it conflict with each other

278. Which of the following is included in SRS?
(a) Cost
(b) Design Constraints
(c) Staffing
(d) Delivery Schedule

279. Which of the following is not included in SRS?
(a) Performance
(b) Functionality
(c) Design solutions
(d) External Interfaces

280. Consider the following Statement: "The output of a program shall be given within 10secs of event X 10% of the time." What characteristic of SRS is being depicted here?
(a) Consistent (b) Verifiable
(c) Non-verifiable (d) Correct

281. Consider the following Statement: "The data set will contain an end of file character. "What characteristic of SRS is being depicted here?
(a) Consistent (b) Non-verifiable
(c) Correct (d) Ambiguous

282. Consider the following Statement: "The product should have a good human interface. "What characteristic of SRS is being depicted here?
(a) Consistent (b) Non-Verifiable
(c) Correct (d) Ambiguous

283. Which two requirements are given priority during Requirement Management of a product?
(a) User and Developer
(b) Functional and Non-functional
(c) Enduring and Volatile
(d) All of the above

284. Why is Requirements Management Important? It is due to the changes
(a) to the environment
(b) in technology
(c) in customer's expectations
(d) in all of the mentioned.

285. Which of the following is not a Requirement Management workbench tool?
(a) RTM (b) DOORS
(c) Rational Suite (d) RDD 100

286. Which of the following is a requirement management activity?
(a) Investigation
(b) Design
(c) Construction and Test
(d) All of the mentioned

287 According to a statistical report: "over 30% of all software projects are cancelled before completion and over 70% of the remainder fail to deliver expected features". What must be the reason for such a situation?
(a) Poor change management
(b) Poor requirements management
(c) Poor quality control
(d) All of the mentioned

288 Software Maintenance includes
(a) Error corrections
(b) Enhancements of capabilities
(c) Deletion of obsolete capabilities
(d) All of the mentioned

289. Maintenance is classified into how many categories?
(a) two (b) three
(c) four (d) five

290. The modification of the software to match changes in the ever changing environment, falls under which category of software maintenance?
(a) Corrective (b) Adaptive
(c) Perfective (d) Preventive

291. How many phases are there in Taute Maintenance Model?
(a) six (b) seven
(c) eight (d) nine

292. What type of software testing is generally used in Software Maintenance?
(a) Regression Testing
(b) System Testing
(c) Integration Testing
(d) Unit Testing

293. Selective retest techniques may be more economical than the "retest-all" technique. How many selective retest techniques are there?
(a) two (b) three
(c) four (d) five

294. Which selective retest technique selects every test case that causes a modified program to produce a different output than its original version?
(a) Coverage (b) Minimization
(c) Safe (d) All of the above

295. ______ measures the ability of a regression test selection technique to handle realistic applications.
(a) Efficiency (b) Precision
(c) Generality (d) Inclusiveness

296. Which regression test selection technique exposes faults caused by modifications?
(a) Efficiency (b) Precision
(c) Generality (d) Inclusiveness

297. "Robustness" answers which of the following description?
(a) CASE tools be used to support the process activities
(b) Process errors are avoided or trapped before they result in product errors
(c) Defined process is acceptable and usable by the engineers responsible for producing the software
(d) Process continues in spite of unexpected problems

298. "Understandability" answers which of the following description?
(a) The extent to which the process is explicitly defined
(b) Process errors are avoided or trapped before they result in product errors
(c) Defined process is acceptable and usable by the engineers responsible for producing the software product
(d) Process continues in spite of unexpected problems

299. How many stages are there in process improvement?
(a) three (b) four
(c) five (d) six

300. In which stage of process improvement bottlenecks and weaknesses are identified?
(a) Process measurement
(b) Process analysis
(c) Process change
(d) None of the mentioned

Answers

1. b	2. c	3. a	4. a	5. b	6. a	7. d	8. d	9. b
10. b	11. a	12. c	13. b	14. c	15. d	16. d	17. d	18. b
19. b	20. b	21. d	22. b	23. a	24. d	25. a	26. c	27. b
28. b	29. d	30. b	31. d	32. a	33. d	34. b	35. a	36. a
37. a	38. b	39. b	40. d	41. b	42. d	43. c	44. a	45. c
46. d	47. d	48. c	49. d	50. a	51. a	52. d	53. b	54. c
55. d	56. c	57. d	58. b	59. d	60. b	61. a	62. b	63. d
64. c	65. b	66. d	67. c	68. d	69. a	70. c	71. d	72. c
73. d	74. b	75. c	76. b	77. a	78. a	79. c	80. d	81. b
82. b	83. b	84. c	85. b	86. a	87. c	88. d	89. b	90. c
91. b	92. c	93. c	94. d	95. d	96. b	97. c	98. c	99. b
100. d	101. d	102. b	103. d	104. c	105. c	106. d	107. a	108. a
109. c	110. d	111. c	112. c	113. b	114. c	115. b	116. d	117. d
118. d	119. a	120. c	121. d	122. a	123. d	124. a	125. d	126. d
127. a	128. d	129. d	130. b	131. c	132. d	133. b	134. c	135. b
136. d	137. d	138. b	139. b	140. c	141. b	142. b	143. d	144. d
145. b	146. b	147. b	148. a	149. c	150. c	151. a	152. d	153. d
154. a	155. a	156. b	157. a	158. a	159. d	160. b	161. d	162. b
163. b	164. a	165. b	166. a	167. c	168. c	169. d	170. d	171. b
172. a	173. c	174. b	175. a	176. c	177. b	178. a	179. c	180. d
181. c	182. a	183. c	184. c	185. d	186. c	187. a	188. b	189. c
190. b	191. b	192. a	193. c	194. c	195. a	196. c	197. c	198. b
199. d	200. a	201. d	202. c	203. c	204. b	205. d	206. a	207. d
208. d	209. c	210. d	211. d	212. a	213. c	214. c	215. c	216. d
217. a	218. d	219. c	220. a	221. a	222. b	223. a	224. c	225. a
226. d	227. a	228. d	229. c	230. b	231. c	232. a	233. a	234. a
235. b	236. c	237. c	238. a	239. c	240. a	241. a	242. d	243. c
244. c	245. b	246. c	247. d	248. d	249. a	250. d	251. a	252. c
253. b	254. a	255. c	256. b	257. a	258. c	259. d	260. b	261. c
262. d	263. d	264. a	265. c	266. c	267. b	268. c	269. a	270. d
271. c	272. d	273. b	274. c	275. c	276. d	277. b	278. c	279. c
280. b	281. b	282. b	283. c	284. d	285. c	286. d	287. b	288. d
289. c	290. b	291. c	292. a	293. b	294. c	295. c	296. d	297. d
298. a	299. a	300. b						

Project Management

1. When is the check list for roles and responsibility of team members prepared?
(a) Just before the project launch
(b) After the project launch
(c) During conceptualization stage
(d) None of the above

2. The interpretation of Quality can vary from person to person due to differences in:
(a) Culture
(b) Nationality
(c) Economic background
(d) All of the above

3. What is not an example of cost of conformance to quality?
(a) Legal liabilities
(b) Planning
(c) Quality audits
(d) Field testing

4. The company has to repair or replace a product. This will be taken as a?
(a) Recall cost
(b) Warranty cost
(c) Scrap and rework cost
(d) Inspection and testing cost

5. Cost of quality categories are:
(a) Prevention and appraisal costs
(b) Internal failure and external failure costs
(c) Prevention, appraisal, internal failure and measurement and testing costs
(d) Prevention, appraisal, internal failure and external failure costs

6 Appraisal cost is:
(a) Prevention cost
(b) The cost of evaluating processes to ensure they are error free
(c) Cost of appraising the project's viability
(d) Cost of appraising rework

7. Effective communication is one of the most important skills required by
(a) The project team
(b) The management
(c) The project manager
(d) The project contractor

8. The following are the possible Interfaces:
(a) Organizational, personnel and external
(b) External and internal
(c) Pure internal and contractual
(d) External and organizational

9. Which of the following does not constitute the role of a project manager:
(a) Integrator and coordinator
(b) Business case approval
(c) Project delivery
(d) Project planning and controlling

10. Who is present in project acceptance review meeting?
(a) Project management team
(b) Customer representative
(c) Project review authority
(d) All of the above

11. Who pays the expense for warranty maintenance?
(a) Project manager
(b) Customer
(c) Contractor
(d) Business executive

12. What is done in Project Health Check?
(a) Planning
(b) Execution
(c) Identification of Success criteria
(d) All of the above

13. Grade of a product:
(a) Means the same thing as quality
(b) Can be used interchangeably with quality
(c) Is the level of a product or service
(d) Depends on the quality of the product

14. The three key levels at which responsibility can be defined is at the ______ level, at the ______ level and at the ______ level.
(a) Project, Strategic, Activity
(b) Project, Activity, WBS
(c) Project, Organization, Team
(d) Team, Organization, contractor

15. The functional manager and project manager have equal power in which organizational structure?
(a) Weak matrix
(b) Functional
(c) Strong matrix
(d) Balanced matrix

16. Mark the option which does not form a component of a communication process model
(a) Arguments (b) Understanding
(c) Feedback (d) Body language

17. The ______ allows determination of the early start, early finish, late start and late finish.
(a) Three-point estimates
(b) Flow chart technique
(c) Precedence diagramming method
(d) Critical path method

18. Monitoring includes:
(a) Developing the monitoring document
(b) Measurement of project performance data
(c) Accepting the changes
(d) Implementing the changes

19. Control is all about
(a) controlling the deviation
(b) Recommending corrective and preventive
(c) Controlling changes
(d) All of the above

20. Monitoring and control ensures:
(a) Project management plan is approved
(b) Documentation management is in place
(c) Project is carried out as per schedule and in estimated budget and resources as planned
(d) None of the above

21. The most critical aspect of product integration is:
(a) Acquiring resources for integrating testing
(b) Managing product component interfaces and ensuring compatibility among them
(c) managing budget during product component development
(d) None of the above

22. Product evaluation can be done at two levels:
(a) Planning and organizing
(b) Verification and validation
(c) Quality control and quality assurance
(d) Sequencing and assembling

23. Verification of a product can be done by:
(a) Structured walkthroughs
(b) Demonstration of functionality
(c) Planned inspection meetings
(d) A&C

24. Sequencing of components integration cannot be decided on the basis of:
(a) Functionality of components
(b) Customer's need of priority
(c) Components dependencies
(d) Project cost estimation

25. Before assembling any product component one should ensure:
(a) Readiness of product integration environment
(b) Each component should be confirmed to be compliant with its interface requirement. Each component should be confirmed to be compliant with its interface requirement.
(c) Integration sequence is properly defined and reviewed.
(d) All of the above

26. Project initial document is not:
(a) Project quality plan
(b) Project management plan.
(c) Project charter
(d) Project scope statement

27. Priority setting technique are "
(a) Compromise and consensus
(b) Top down and rolling wave
(c) Dot voting and Weighted voting
(d) Probality and impact

28. Parato analysis helps to identify
(a) About 20% of the most critical issue
(b) About 80% of the most critical issue
(c) About 100% of the issue status
(d) About 20% of the issue status.

29. Issue histogram helps to:
(a) Review all pending issues
(b) Give overall status of the project issue
(c) Identify the most critical issue in the project
(d) All of the above

30. The amount of monitoring of contractors work by the project manager will vary based on:
(a) The value of the contract
(b) The type of contract being used
(c) The reputation of the contractor
(d) The nature of work being done

31. What is not true?
(a) Both the buyers and sellers project manager should be aware of the contracts legal implication
(b) Seller must meet all contractual obligations
(c) Contractor must complete work receiving any payment
(d) Project Manager is responsible to ensure seller is meeting all requirement

32. Which of the following is not project management goal?
(a) Keeping overall costs within budget.
(b) Delivering the software to the customer at the agreed time.
(c) Maintaining a happy and well-functioning development team.
(d) Avoiding costumer complaints.

33. Which of the following is not considered as a risk in project management?
(a) Specification delays
(b) Product competition
(c) Testing
(d) Staff turnover

34. The process each manager follows during the life of a project is known as
(a) Project Management
(b) Manager life cycle
(c) Project Management Life Cycle
(d) All of the mentioned

35. A 66.6% risk is considered as
(a) very low (b) low
(c) moderate (d) high

36. Which of the following is/are main parameters that you should use when computing the costs of a software development project?
(a) travel and training costs
(b) hardware and software costs

(c) effort costs (the costs of paying software engineers and managers)
(d) All of the mentioned

37. Quality planning is the process of developing a quality plan for
(a) team (b) project
(c) customers (d) project manager

38. Which of the following is incorrect activity for the configuration management of a software system?
(a) Internship management
(b) Change management
(c) Version management
(d) System management

39. Identify the sub-process of process improvement
(a) Process introduction
(b) Process analysis
(c) De-processification
(d) Process distribution

40. Which of the following refers to a narrative description of the work to be accomplished?
(a) The statement of work (SOW)
(b) The project specifications
(c) The milestone schedule
(d) The work breakdown structure (WBS)

41. Scope of a project is the ______ total of all of a project's products and their requirements or features
(a) Sum
(b) Product
(c) Sum and product
(d) None of the above

42. Which of the following life cycle phases includes brainstorming and common sense at planning stage?
(a) Conceptualization
(b) Feasibility
(c) Preliminary planning
(d) Detail planning

43. Which of the following require input from a large number of functional units and usually control vast resources?
(a) Individual projects
(b) Staff projects
(c) Special projects
(d) Matrix or Aggregate projects

44. Which of the following is the responsibility of proposed project manager?
(a) Project Plan & strategy
(b) Description of Project Organization
(c) Development of organizational Chart
(d) All of the given options

45. Which post implementation review method helps in detection of fraud?
(a) Health Checks
(b) Project Audits
(c) Post Implementation reviews
(d) None of the above

46. Providing required quality in the project can be defined as:
(a) Conformance to requirements
(b) Gold Plating
(c) Achieving six Sigma
(d) Having Zero defect

47. Initial project definition is required to establish:
(a) Project documentation management system Project documentation management system
(b) A common understanding among all stakeholders
(c) A basic foundation for project Integration
(d) B&C

48. Gives a summary level project definition
(a) Project charter
(b) Scope management plan
(c) Cost management plan
(d) All of the above

49. Project definition does not include:
(a) Business Read
(b) Project purpose and description
(c) A summary milestone and budget
(d) Network diagram

50. Development of project management plan is:
(a) An iterative process
(b) Progressive elaboration process
(c) A rolling wave technique
(d) All of the above

51 Managing plan includes
(a) Development of products, services and results
(b) Development of network diagram for the project.
(c) Integrating approved changes across the entire project.
(d) Hiring human resources for the project.

52. Core functions for the project management integration are Core functions for the project management integration are
(a) Communication and procurement
(b) Scope and quality
(c) Risk and human resource
(d) All of the above

53 Facilitating functions for the project management integration are
(a) Communication and procurement
(b) Scope and quality
(c) cost and time
(d) All of the above

54. Preventive action is a documented procedure for executing the project work in order to
(a) Prevent recurrence and eliminates the cause of nonconformities
(b) Repair and correct defects identified in the project.
(c) Identify new risks in the project.
(d) All of the above

55. Outcomes of a successful management of project execution are:
(a) A verified product, services and result which was expected as a delivery from the project.
(b) Implementation of corrective actions, preventive actions and defect repair identified during the project execution.
(c) Updated project documents for lesson learn and improvement activity.
(d) All of the above

56. Conformance to the requirements:
(a) Is the condition of the product or service in relation to customer's requirements
(b) Is same as customer satisfaction
(c) Is a tool used to measure quality
(d) Gold plating

57. Which of the following is the discount rate that equates the present values of the two sets of flows?
(a) Discounted Cash Flow
(b) Pay Back Period
(c) Discounted Cash Flow
(d) Internal Rate of Return

58. Which of the following items involves the quantitative aspects of planning?
(a) Budget development
(b) Project administration
(c) Leadership styles
(d) Conflict management

59. The main purpose of a ______ is to function as a blueprint for the group's business operations.
(a) Business Plan
(b) Scope statement
(c) Feasibility Study
(d) Work Breakdown Structure

60. ______ is the lowest level of quality development.
(a) Quality Assurance
(b) Quality Management
(c) Inspection
(d) Total Quality Management

61. Fredrick Taylor- Father of Scientific Management was a ______.
(a) Mechanical Engineer
(b) Chemical Engineer
(c) Technical Engineer
(d) Electrical Engineer

62. Fitness to cost can be obtained by:
(a) Determining the customer's needs
(b) Building of customer needed products
(c) Obtaining high quality and low cost products
(d) Developing quality management

63. All of the following are relevant factors of competitive bids EXCEPT:
(a) Schedule
(b) Financial Stability
(c) Financing Offer
(d) Ease of minor changes adopted

64. The emphasis is changed from product to process at ______ stage.
(a) Inspection
(b) Quality control
(c) Quality management
(d) Quality assurance

65. Quality is defined by______.
(a) Customer
(b) Proposal manager
(c) Higher management
(d) Quality management

66. identify the example that would not usually be considered a project.
(a) Building a car
(b) Developing a computer software application program
(c) Designing a new product
(d) Installing new equipment in an existing production line

67. According to the authors, the prime objectives of project management are cost, time and
(a) Schedule
(b) Quality
(c) Customer satisfaction
(d) Performance

68. The term "program" refers to an exceptionally large, long-range objective that is broken down into a set of ______.
(a) Tasks (b) Projects
(c) Subprojects (d) Campaigns

69. Who issue the purchase order?
(a) Buyer
(b) Seller
(c) Project Manager
(d) None of the above

70. What is not the part of the purchase order close out?
(a) Operating instructions
(b) Compliance with the delivery terms
(c) Preparing project management plan
(d) Vendor's claim

71. Which is not part of core element of contract
(a) Payment terms
(b) company leave policy
(c) statement of work
(d) None of the above

72. When is the project close out reports prepared?
(a) Planning stage
(b) Implementation life cycle
(c) End of the project
(d) Execution stage

73. Which documents are ensured to be closed in project close out?
(a) Risk management log
(b) Project Change Log
(c) A and B
(d) None of the above

74. Which Resources Are Included In The Resource Close Out?
(a) Man (b) Material
(c) Equipment (d) All of the above

75. Which aspect is included during lessons learnt from projects?
(a) Positive
(b) Negative
(c) Both
(d) None of the above

76. What is necessary to accept a project?
(a) Project plan
(b) Meeting acceptance criteria
(c) Executing a plan
(d) Resource Allocation

77. When is the project acceptance done?
(a) Project had satisfied requirement with some minor errors/omissions
(b) Project had not satisfied the acceptance
(c) Project had satisfied the acceptance
(d) At the implementation stage

78. Which of the following statements are not true:
(a) Often the end users are involved in validation activities.
(b) Validation can be done after verification.
(c) Validation cannot be done in parallel to the verification.
(d) Validation is concern with acceptance of the deliverable.

79. Verification is not:
(a) Concern with acceptance of the deliverable
(b) Done by functionality demonstration
(c) Done by planned inspection
(d) Done by structured walkthrough

80. Document control does not ensure:
(a) All documents should be under configuration management
(b) Documents are approved prior to use.
(c) All changes are reviewed and approved
(d) Relevant versions of applicable documents are available at point of use.

81. Criteria for priority setting does not include:
(a) Business impact/importance
(b) Customer's needs/urgency
(c) Team performance
(d) Impact on the project or organization's other functional groups

82. Issues are tracked on the basis of
(a) Resolved and pending issues
(b) Major and minor
(c) Start and stop
(d) None

83. Project audits, health checks and post implementation reviews are used for:
(a) Quality assurance
(b) Conducting post project reviews
(c) Identifying risks
(d) All of the above

84. A key parameter for scope verification is:
(a) Change control process
(b) Inspections
(c) Revised time estimates
(d) Revised cost and time estimates

85. During project execution and close-out the emphasis of configuration management is to:
(a) Measure components delivery against the configuration baseline and deliver the overall system

(b) Deliver the overall system after testing the product or service's characteristics
(c) Firm up the configuration baseline
(d) Review whether the project delivered all the features fully and correctly

86. You are leading a project that has many key stakeholders. One of the key stakeholders asks you to make a crucial change towards the end of the project. To deal with such requests you should:
(a) Have a well established change control process to deal with all change requests
(b) Check with other stakeholders before accepting the change
(c) Accept the change as it is an important stakeholder and you do not want to offend him
(d) Forward the request to the Sponsor and let him decide to accept the change or not

87. You are unable to meet your timelines for an important software project as there were many changes in the functionalities being provided. All of the following could have given rise to this situation except:
(a) Scope creep
(b) Innovation
(c) Poor initial planning
(d) Poor leadership

88. What documents would you Not use to close out the project if contracts are used?
(a) Contract changes
(b) Product description
(c) Acceptance criteria
(d) Assumptions

89. Before you can close out the project you must first:
(a) Fire all the temporary staff hired for the project
(b) Get a letter of Acceptance from the client
(c) Assign team members to a new project
(d) Conduct a project review for lessons learned

90. A Procurement Audit can best be described as a:
(a) Review to check that the procured items were delivered
(b) Review to check that the contractor did not overcharge
(c) Review of the procurement process to check the suitability of the procurement processes
(d) Review to check the contract price

91. All projects should be formally closed:
(a) Update and file all the project records
(b) Verify the project deliverables
(c) When they are terminated
(d) All of the above

92. Five attributes that characterize a project include:
(a) Purpose, repetition, interdependencies, consistency, uncertainty
(b) Lifecycle, schedule, cost, uncertainty, independence
(c) Performance, lifecycle, uniqueness, conflict, interdependencies
(d) Purpose, lifecycle, conflict, certainty, independence

93. The mission of the ______ is to foster the growth of project management and build professionalism in the field.
(a) Project Management Institute
(b) Manhattan Project

(c) Project Management Book of Knowledge
(d) ARPAnet

94. Which of the following statements is false in regards to projects?
(a) Projects have limited budgets.
(b) Projects have life cycles.
(c) On most projects, conflict does not exist.
(d) Every project has some elements that are unique.

95. ______, a term used to cover both risk quantification and risk response planning, is devoted to estimating the impacts that uncertainties have on project outcomes.
(a) risk planning (b) risk analysis
(c) risk mitigation (d) risk mining

96. Who issues the warranty?
(a) Manufacturer (b) Customer
(c) Retailer (d) A&C

97. When is warranty rights enforced against suppliers
(a) When warranty is not violated
(b) When warranty is violated
(c) During pre-delivery of goods and services
(d) Suppliers do not meet the commitment in delivery

98. In Contract close out, one should:
(a) Measure the performance of a contracting organization based on specification and the technical aspects
(b) Measure how well did the contractor behaved
(c) Measure the personal relationship with the contractor
(d) Measure customer satisfaction

99. During contract closeout a product verification is done to:
(a) Ensure that the seller's work is complete and satisfactorily meets all the requirements
(b) Verify the products design
(c) To document the seller's work
(d) Verify the work completed for making seller payments.

100. Contract close out involves all of the following except:
(a) Relocating team members
(b) Formal acceptance of the work by the buyer
(c) Updating the contract file
(d) Product Verification

Answers

1. a	2. d	3. a	4. b	5. d	6. b	7. c	8. d	9. b
10. d	11. c	12. c	13. c	14. a	15. d	16. a	17. d	18. b
19. d	20. c	21. b	22. b	23. d	24. d	25. d	26. a	27. c
28. a	29. a	30. b	31. c	32. d	33. c	34. c	35. d	36. d
37. b	38. a	39. b	40. a	41. a	42. a	43. d	44. d	45. b
46. a	47. d	48. a	49. d	50. d	51. c	52. b	53. a	54. b
55. d	56. a	57. d	58. a	59. a	60. d	61. a	62. c	63. d
64. d	65. a	66. a	67. d	68. b	69. a	70. c	71. b	72. c
73. c	74. d	75. c	76. b	77. c	78. c	79. b	80. a	81. c
82. a	83. b	84. b	85. a	86. a	87. b	88. d	89. b	90. c
91. d	92. c	93. a	94. c	95. b	96. d	97. b	98. a	99. a
100. a								